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MONTHLY PROGRESS REPORT NO. 15
for the period May 1-31, 1977
to
ENVIRONMENTAL PROTECTION AGENCY
REGION VIII

1860 Lincoln St., Suite 900
Denver, CO 80203

Contract No. 68-01-1946

Utah U-a/U-b Tract

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ENVIRONMENTAL PROTECTION AGENCY
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1860 Lincoln St., Suite 900
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by

Aeromet, Inc.
Box FF
Norman, OK 73070

Utah U-a/U-b Tract

1.0 INTRODUCTION

Low level temperature and wind data were collected for May, 1977 at Casper, Wyoming; near the Colorado C-b Tract 25 miles west of Rio Blanco, Colorado; Craig, Colorado; Escalante and Hanksville Utah; Rock Springs, Wyoming; and the U-a/U-b Tract 5 miles south of Bonanza, Utah. The data collection was made using a 30 gm helium filled pilot balloon with a temperature sonde attached, a single theodolite and a TSR-2 receiver/recorder twice a day every other day. The observations were made ½ hour after sunrise and 1400L.

The pilot balloon had an ascent rate of 500 ft/min and it was tracked by a single theodolite for 12 minutes with the azimuth and elevation angles recorded every 30 seconds on a cassette tape recorder. The tape was transcribed to a pilot balloon form after the observation.

The temperature sonde operated at 403 MHz and the signal was received by a ground plane antenna at least 24 ft. AGL which was attached to the Aeromet, Inc. TSR-2 receiver/recorder. The TSR-2 receiver has a built-in Rustrak strip chart recorder and the temperature was recorded within the range from -50°C to +50°C. A baseline temperature calibration was performed with each T-Sonde by the adjustment of the recorded temperature to match the thermometer measured temperature next to the transmitting sonde. Once the calibration check was finished the balloon was released with the sonde attached and the temperature was recorded for at least 20 minutes. At the completion of each observation the data were mailed to Aeromet, Inc.

The Monthly Progress Report is divided into seven parts, one corresponding to each of the seven field sites. The collected temperature and wind data are accurate and have not been edited unless otherwise stated in the Pilot Balloon Summary Section. However, the obvious errors sometimes found in the recorded azimuth and elevation angles are corrected without mention. For example, the sequence of azimuth angles . . . 76.6, 75.3, 47.8, 73.8 . . . can be corrected without ambiguity. The more ambiguous errors are brought to the attention of the reader if editing has been performed, otherwise, the data are left as recorded and the filtering is left to the individual user. An example is the wind profile for Hanksville on 06/29/76 at 1300 MST found in the Monthly Progress Report No. 4. The azimuth angles starting 30 seconds after the launch and incremented by the same are as follows . . . 109.0, 110.0, 110.0, 281.0, 280.0, 282.0 . . . , while the corresponding elevation angles are as follows, . . . 60.0, 57.6, 58.7, 58.6, 52.7, 44.3 . . . . The wind speed and direction change dramatically over the interval as can be seen in the report since these data were not edited.

2.0 DATA SUMMARY

2.1 Utah U-a/U-b Tract Field Summary

There were no major problems during the month of May at the site. The observer failed to clearly mark the release time on the temperature trace for the first 6 soundings of the month. The release time was estimated based on the information recorded, and is felt to be accurate to within 15 seconds.

The observer attempted 100% of the scheduled pilot balloon launches resulting in 100% recovery of the temperature and 94% recovery of the wind data. A 3% loss in wind data resulted from a rain shower and an additional 3% loss resulted from bad data.

2.2 Mixing Layer Height

The average mixing layer height was computed for the morning and afternoon based on the morning and 1400L temperature soundings. The balloon release ½ hour after sunrise is near enough to the minimum temperature to assume the correctness of the calculated mixing layer heights. The afternoon balloon release is generally not at the time of maximum heating and the user of the mixing layer height data must be aware that minor changes in the calculated values can be expected. Without equipping the field sites with minimum/maximum thermometers the extrapolation of the afternoon data can not be justified in establishing a data base for statistical analysis. The approximation of the afternoon maximum temperature would be a "calculated guess" for there are: 1) local effects which are to be determined and would be filtered out with extrapolation, 2) mountain effects which alter the lower 1500m (e.g. downslope effects), and 3) meteorological effects which can alter the expected change in the sounding (e.g. advection, moisture, etc.).

It is felt that to better define the mixing layer height that a variety of "heat island" effects should be viewed. The rigorous method would be to define 15 "heat island" effects ranging from 0 to 14°C and let the user decide which would best serve his needs. However, for these analysis 0°, +5° and +10° "heat island" effects are calculated and listed for the morning and afternoon soundings in the table Average Mixing Layer Height.

The symbol N/D means that no mixing layer height was defined and sfc is the abbreviation for surface.

2.3 Stability and Inversion Classification

The temperature and wind data were edited to remove data felt to cause anomalous results in the stability and inversion classification schemes. Only the stations listed prior to the table classifying the inversions were used in the calculations.

3.0 DATA PROCESSING

3.1 Printed and Plotted Output

Wind speeds and directions are computed from the azimuth and elevation angles measured while tracking the balloon with the theodolite. The wind speed and direction are plotted versus height and printed out at 30 second intervals. The printed output includes the AGL and MSL height of the calculated wind value and the orthogonal components of the wind. The wind profile is also punched on computer cards at 30 second intervals.

The temperature data are processed and plotted with the temperature and the lapse rate per 300 meters versus height at 15 second intervals. Tic marks are placed on the temperature plot at significant levels. A solid line to the right side of the plot indicates the data for that layer are interpolated temperature values. The temperature data are also printed out and punched on cards. The asterisk beside a height value indicates a significant level while a "?" indicates interpolated data.

The temperature data are also processed to produce for each site a monthly summary of inversion layers and lapse rates within the inversions and from the inversion base to the surface by means of the Holzworth classification scheme for inversions (Holzworth, G.C., 1974: "Climatological Data on Atmospheric Stability in the United States" Paper presented at the American Meteorological Society Symposium on Atmospheric Diffusion and Air Pollution, September 9-13, 1974. Santa Barbara, California.)

The temperature and wind data are processed together to produce for each site a monthly average bivariate frequency distribution of wind direction versus wind speed represented in the 500m layer adjacent to the ground. The distribution is presented by the six Pasquill stability classes (A-F) and a summary independent of stability. If the $\Delta T/100m$ criterion is met but the wind speed criterion is not met, then the

STABILITY CLASS	ΔT (°C/100m)	WIND SPEED
A	<-1.9	≤ 2
B	-1.9 - -1.7	≤ 5
C	-1.7 - -1.5	≤ 6
D	-1.5 - -0.5	ALL SPEEDS
E	-0.5 - 1.5	≤ 5
F	>1.5	≤ 3

wind data are checked against the criterion for the next stability class, always cascading to the D stability class. Once the wind speed criterion is met the data are classified under the new stability class even though now the lapse rate exceeds the class criterion. For example,

if the $\Delta T/100m$ value is 1.7 and the wind speed is 7 m/s, the lapse rate criterion is met for the stability class F, however the wind speed criterion is exceeded. The wind speed is greater than the 5 m/s maximum limit for class E but falls within the criterion of class D, which includes all wind speeds. As a result the observational data with a ΔT value of 1.7°C/100 m and a wind speed value of 7 m/s are classified under stability class D, not class F.

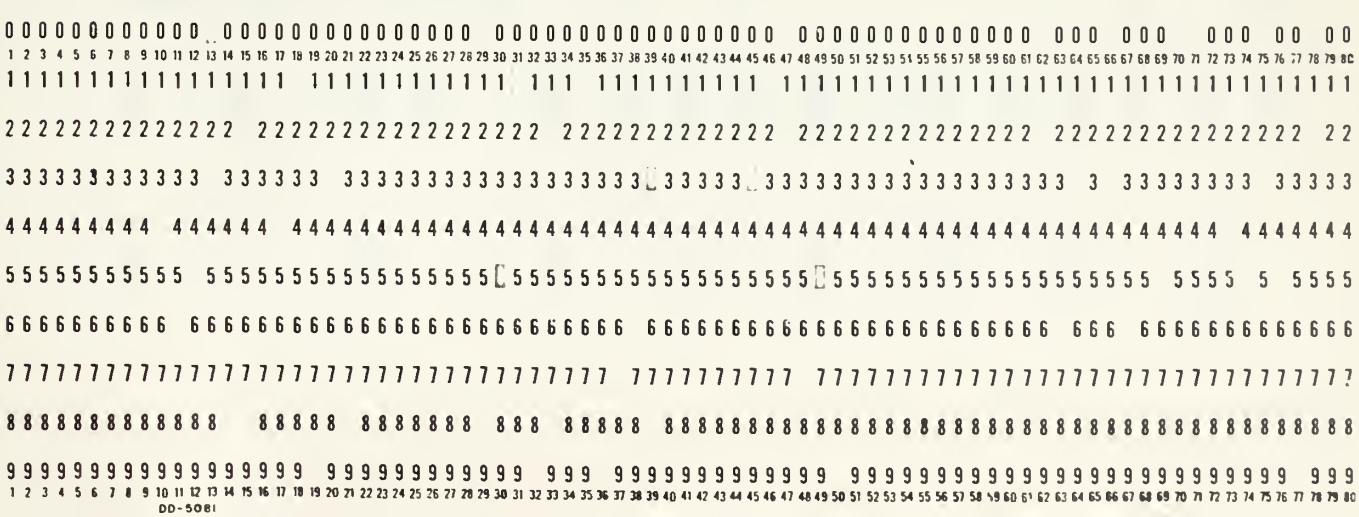
The data are also punched on computer cards in a format compatible with the STAR PROGRAM of the National Climatic Center, NOAA, U.S. Department of Commerce.

3.2 Punched Output

The punched temperature and wind data for each observation are categorized into four groups, each separated by a blank card. The first group begins with a header card listing the station name (3A4), the station elevation in meters (I4), the month, date and year (I6), the observation time (I4), the time zone (A3), the balloon ascent rate in feet per minute (I3), the sampling interval in seconds (I2), the temperature error in °C (F5.1), the T-Sonde I.D. number (I5) and the surface wind speed in kts and direction (2F6.1). A surface wind speed of 180.0 KTS indicates missing surface wind data. The series of cards prior to the first blank card include on each card the elapse time in minutes (2X,F5.1), the height of the balloon in meters AGL (4X,F5.0), the height of the balloon in meters MSL(4X,F5.0), the temperature in °C (4X,F6.2), the change in temperature between standard or significant levels (2X,F6.2), the lapse rate per 300m (2X,F6.2), the difference in the lapse rate per 300m and the dry adiabatic lapse rate per 300m (2X,F6.2), the wind speed in m/s if known (4X,F5.1), and the wind direction if known (3X,F5.0). The cards following the first blank card include on each card the elapse time in minutes (2X,F5.1), the height in meters AGL (4X,F5.0), the height in meters MSL (4X,F5.0), the u-component of the wind in m/s (4X,F6.1), the v-component of the wind in m/s (6X,F6.1), the wind speed in m/s (7X,F5.1), the wind direction (6X,F5.0), the elevation angle in degrees (F5.1) and the azimuth angle in degrees (F5.1). The cards after the second blank card include a header card like before and a series of cards with four groups of the following on each card; the height in meters AGL (F6.1), the temperature in °C (F6.2), the lapse rate °C/300m (F6.2) and a blank space (1X). The cards after the third blank card include a header card the same as described earlier, eight cards with the original digitized temperature data and a flag to indicate interpolated data (20(F3.1,I1)), five cards with the elevation angle in degrees (16F5.1), and five cards with the azimuth angle in degrees (16F5.1). The temperature data are in degrees Celsius and have 50°C added to each value. An elevation angle of 180° indicates a missing azimuth and elevation angle value.

The punched output from the bivariate frequency distribution calculations include a header card as illustrated below,

MONTH: MARCH YEAR: 1976. CASPER SFC TO 500 METERS



PILOT BALLOON SUMMARY
Utah U-a/U-b Tract
May, 1977

May 1	0517	The release time of the balloon on the temperature trace was not clearly marked so the start time may be off as much as 15 seconds.
	1351	Temperature values were interpolated over the interval from 8½ to 14¼ minutes. The start time on the temperature trace was not clearly marked and may be in error by 15 seconds.
May 3	0516	There may be an error as large as 15 seconds in the elapsed time of the temperature data.
	1349	Temperature values were interpolated over the interval from 11 to 14¼ minutes. The observer did not clearly mark the start time on the temperature data trace so it had to be estimated.
May 5	0515	
	1350	Temperature values were interpolated over the interval from 10½ to 14¼ minutes.
May 7	0508	
	1357	Temperature values were interpolated over the interval from 8½ to 12¼ minutes.
May 9	0506	
	1351	
May 11	0503	
	1350	
May 13	0502	
	1352	Temperature values were interpolated over the interval from 8 to 12 minutes.
May 15	0502	
	1353	Temperature values were interpolated over the interval from 6 3/4 to 12½ minutes.

PILOT BALLOON SUMMARIES
Utah U-a/U-b Tract
May, 1977

May 17	0500	Rain prevented the collection of the wind data.
	1355	
May 19	0458	
	1352	
May 21	0502	Temperature values were interpolated over the interval from 10 to 11 3/4 minutes.
	1352	Temperature values were interpolated over the interval from 6 to 12¼ minutes.
May 23	0455	
	1350	Balloon was lost behind some hills at 2½ minutes. The wind data are not assumed to be correct.
May 25	0453	
	1351	Balloon was lost in clouds at 4½ minutes.
May 27	0452	
	1259	
May 29	0451	
	1350	
May 31	0448	Temperature values were interpolated over the interval from 8 to 12 minutes.
	1350	

AVERAGE MIXING LAYER HEIGHT

Utah U-a/U-b Tract

May 1977

HEIGHT IN METERS

	MORNING			AFTERNOON		
DATE	0°	+5°	+10°	0°	+5°	+10°
1	100m	300m	450m	sfc	2500m	3100m
3	sfc	300m	450m	50m	3250m	N/D
5	sfc	300m	700m	100m	2500m	N/D
7	sfc	50m	200m	2500m	3250m	N/D
9	sfc	200m	700m	450m	1150m	1850m
11	sfc	150m	400m	1100m	2100m	N/D
13	sfc	250m	950m	1150m	2600m	3800m
15	50m	2250m	N/D	2450m	N/D	N/D
17	250m	3750m	N/D	450m	1650m	3650m
19	sfc	200m	2050m	350m	1300m	1700m
21	sfc	250m	1350m	2150m	3500m	N/D
23	sfc	250m	1000m	150m	750m	2650m
25	100m	1500m	3500m	3200m	4000m	N/D
27	50m	650m	3200m	1500m	2350m	N/D
29	sfc	200m	600m	900m	2350m	N/D
31	sfc	150m	550m	400m	1250m	1700m

CLOUD COVER AND SIGNIFICANT WEATHER

Utah U-a/U-b Tract

May, 1977

DATE	MORNING	AFTERNOON
1	scattered	overcast
3	overcast	broken
5	scattered	broken
7	clear	scattered
9	scattered	scattered
11	scattered	broken
13	scattered	broken
15	broken	broken
17	broken; light rain	overcast
19	scattered	scattered
21	scattered	scattered
23	broken	overcast
25	overcast	broken
27	broken	broken
29	scattered	broken
31	clear	clear

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4596

ATE 05/01/77 TIME 05:17MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
38.	876.	1.02	-1.99

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4594

ATE 05/01/77 TIME 13:51MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
0.	191.	0.09	0.0

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4592

ATE 05/03/77 TIME 05:16MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
0.	914.	0.70	0.0

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4590

ATE 05/03/77 TIME 13:49MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
76.	114.	2.07	-0.81

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4595

ATE 05/05/77 TIME 05:15MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
0.	457.	0.87	0.0

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4393

ATE 05/05/77 TIME 13:50MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
76.	152.	0.24	-1.06

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4591

ATE 05/07/77 TIME 05:08MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
0.	343.	2.55	0.0

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4589

DATE 05/07/77 TIME 13:57MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

THERE ARE NO INVERSION BASES WITHIN 0M OF THE SFC

LAYER BASE METERS AGL	LAYER TOP METERS AGL	DT/DZ (DEG C)/100M
0.	100.	-2.27
100.	250.	-1.01
250.	500.	-1.03
500.	750.	-0.90
750.	1000.	-1.10
1000.	1500.	-0.98

****

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4587

DATE 05/09/77 TIME 05:06MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
0.	343.	1.28	0.0

****

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4585

DATE 05/09/77 TIME 13:51MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
317.	356.	0.0	-1.27

****

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4583

DATE 05/11/77 TIME 05:03MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
0.	457.	1.34	0.0

****

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4581

DATE 05/11/77 TIME 13:50MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
294.	339.	0.40	-1.63

****

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4588

DATE 05/13/77 TIME 05:02MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
0.	457.	0.67	0.0

****

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4586

DATE 05/13/77 TIME 13:52MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
184.	224.	0.0	-1.48

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4584

DATE 05/15/77 TIME 05:02MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
0.	191.	0.09	0.0

****

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4582

DATE 05/15/77 TIME 13:53MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

THERE ARE NO INVERSION BASES WITHIN 1500M OF THE SFC

LAYER BASE METERS AGL	LAYER TOP METERS AGL	DT/DZ (DEG C)/100M
0.	100.	-1.74
100.	250.	-1.17
250.	500.	-1.00
500.	750.	-1.02
750.	1000.	-0.78
1000.	1500.	-1.07

****

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4580

DATE 05/17/77 TIME 05:00MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
267.	305.	1.50	-1.00

****

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4578

DATE 05/17/77 TIME 13:55MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
484.	523.	1.21	-0.97

****

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4576

DATE 05/19/77 TIME 04:58MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
0.	229.	1.59	0.0

****

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4574

DATE 05/19/77 TIME 13:52MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
232.	308.	0.12	-1.41

****

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4579

DATE 05/21/77 TIME 05:02MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
0.	305.	0.78	0.0

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4575

DATE 05/21/77 TIME 13:52MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

THERE ARE NO INVERSION BASES WITHIN 1500M OF THE SFC

LAYER BASE METERS AGL	LAYER TOP METERS AGL	DT/DZ (DEG C)/100M
0.	100.	-5.63
100.	250.	-0.94
250.	500.	-0.81
500.	750.	-1.05
750.	1000.	-1.08
1000.	1500.	-0.96

****

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4573

DATE 05/23/77 TIME 04:55MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
0.	457.	0.60	0.0

****

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4801

DATE 05/23/77 TIME 13:50MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
114.	381.	0.03	-1.15

****

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4792

DATE 05/25/77 TIME 04:53MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
495.	533.	0.0	-0.66

****

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4810

DATE 05/25/77 TIME 13:51MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
182.	220.	0.47	-1.49

****

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4803

DATE 05/27/77 TIME 04:52MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
0.	191.	0.25	0.0

****

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4802

DATE 05/27/77 TIME 12:59MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
1045.	1483	0.0	-1.00

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4812

DATE 05/29/77 TIME 04:51MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
0.	762.	0.57	0.0

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4809

DATE 05/29/77 TIME 13:50MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
133.	210.	0.70	-1.84

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4806

DATE 05/31/77 TIME 04:48MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
0.	800.	0.63	0.0

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4793

DATE 05/31/77 TIME 13:50MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

INV BASE METERS AGL	INV TOP METERS AGL	INV DT/DZ (DEG C)/100M	DT/DZ BELOW INV (DEG C)/100M
257.	333.	0.0	-1.54

MONTH: MAY YEAR: 1977. UTAH UAUB ELEV 1585 METERS

HOLZWORTHIS CLASSIFICATION SCHEME FOR INVERSIONS
MODIFIED TO SHOW TOTAL NUMBER INSTEAD OF PERCENT

THICKNESS (METERS)	INVERSION BASE HEIGHT (M) SFC	1- 100	101- 250	251- 500	501- 750	751- 1000	1000- 1500	1501- 2000	2001- 2500	2501- 3000	TOTAL
1 - 100	0	2	4	6	0	0	1	0	0	0	13
101 - 250	4	0	0	0	0	0	0	0	0	0	4
251 - 500	7	0	1	0	0	0	0	0	0	0	8
501 - 750	0	0	0	0	0	0	0	0	0	0	0
751 - 1000	3	1	0	0	0	0	0	0	0	0	4
1001 - 1500	0	0	0	0	0	0	0	0	0	0	0
> 1500	0	0	0	0	0	0	0	0	0	0	0
INV TOTAL	14	3	5	6	0	0	1	0	0	0	29
DT/DZ 5		0	0	0	0	0	0	0	0	0	0
FROM INV 4		0	0	1	0	0	0	0	0	0	1
BASE 3		2	1	2	0	0	1	0	0	0	6
TO 2		0	3	2	0	0	0	0	0	0	5
SFC 1		1	1	1	0	0	0	0	0	0	3
NO INV TOT		3	3	3	3	3	3				
DT/DZ FOR 5		0	0	0	0	0	0				
SAME 4		0	0	0	0	1	0				
LAYERS 3		0	3	3	3	2	3				
AS INV 2		0	0	0	0	0	0				
BASE 1		3	0	0	0	0	0				

DT/DZ (DEG C)/100M

5= 0.00 TO -0.40
4=-0.41 TO -0.80
3=-0.81 TO -1.20
2=-1.21 TO -1.60
1=<-1.60

MONTH: MAY YEAR: 1977. ,UTAH UAUB SFC TO 500 METERS

NORMALIZED FREQUENCY DISTRIBUTION

DIRECTION	SPEED (METER/SEC) 0-3	4-6	7-10	11-16	17-21	GREATER THAN 21	AVERAGE SPEED	TOTAL
N	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NNE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ENE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ESE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WSW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
W	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WNW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NNW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
AVG SPEED	0.0	0.0	0.0	0.0	0.0	0.0		0.0
TOTAL	0.0	0.0	0.0	0.0	0.0	0.0		0.0

RELATIVE FREQUENCY OF OCCURRENCE OF THE A STABILITY CLASS IS 0.0

RELATIVE FREQUENCY OF CALM 0.0

A TOTAL OF 2 SOUNDINGS FROM A SAMPLE OF 32 SOUNDINGS DID NOT HAVE 500 M OF TEMP AND WIND DATA

MONTH: MAY YEAR: 1977. . UTAH UAUB SEC TO 500 METERS

NORMALIZED FREQUENCY DISTRIBUTION

DIRECTION	SPEED (METER/SEC) 0-3	4-6	7-10	11-16	17-21	GREATER THAN 21	AVERAGE SPEED	TOTAL
N	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NNE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ENE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ESE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WSW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
W	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WNW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NNW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
AVG SPEED	0.0	0.0	0.0	0.0	0.0	0.0		0.0
TOTAL	0.0	0.0	0.0	0.0	0.0	0.0		0.0

RELATIVE FREQUENCY OF OCCURRENCE OF THE B STABILITY CLASS IS 0.0

RELATIVE FREQUENCY OF CALM 0.0

A TOTAL OF 2 SOUNDINGS FROM A SAMPLE OF 32 SOUNDINGS DID NOT HAVE 500 M OF TEMP AND WIND DATA

MONTH: MAY YEAR: 1977. UTAH UAUB SFC TO 500 METERS

NORMALIZED FREQUENCY DISTRIBUTION

DIRECTION	SPEED (METER/SEC) 0-3	4-6	7-10	11-16	17-21	GREATER THAN 21	AVERAGE SPEED	TOTAL
N	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NNE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ENE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ESE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WSW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
W	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WNW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NNW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
AVG SPEED	0.0	0.0	0.0	0.0	0.0	0.0		0.0
TOTAL	0.0	0.0	0.0	0.0	0.0	0.0		0.0

RELATIVE FREQUENCY OF OCCURRENCE OF THE C STABILITY CLASS IS 0.0

RELATIVE FREQUENCY OF CALM 0.0

A TOTAL OF 2 SOUNDINGS FROM A SAMPLE OF 32 SOUNDINGS DID NOT HAVE 500 M OF TEMP AND WIND DATA

MONTH: MAY YEAR: 1977. UTAH UAUB SFC TO 500 METERS

NORMALIZED FREQUENCY DISTRIBUTION

DIRECTION	SPEED (METER/SEC) 0-3	4-6	7-10	11-16	17-21	GREATER THAN 21	AVERAGE SPEED	TOTAL
N	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NNE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ENE	0.05	0.0	0.0	0.0	0.0	0.0	1.5	0.05
E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ESE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSE	0.05	0.0	0.05	0.05	0.0	0.0	7.8	0.16
S	0.0	0.0	0.16	0.05	0.0	0.0	10.0	0.21
SSW	0.0	0.16	0.11	0.0	0.0	0.0	6.5	0.26
SW	0.0	0.05	0.0	0.0	0.0	0.0	4.3	0.05
WSW	0.0	0.05	0.0	0.0	0.0	0.0	5.3	0.05
W	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WNW	0.0	0.16	0.0	0.0	0.0	0.0	4.6	0.16
NW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NNW	0.0	0.05	0.0	0.0	0.0	0.0	5.6	0.05
AVG SPEED	1.9	4.7	8.6	13.4	0.0	0.0		0.0
TOTAL	0.11	0.47	0.32	0.11	0.0	0.0		1.00

RELATIVE FREQUENCY OF OCCURRENCE OF THE D STABILITY CLASS IS 0.63

RELATIVE FREQUENCY OF CALM 0.0

A TOTAL OF 2 SOUNDINGS FROM A SAMPLE OF 32 SOUNDINGS DID NOT HAVE 500 M OF TEMP AND WIND DATA

MONTH: MAY YEAR: 1977. UTAH UAUB SFC TO 500 METERS

NORMALIZED FREQUENCY DISTRIBUTION

DIRECTION	SPEED (METER/SEC) 0-3	4-6	7-10	11-16	17-21	GREATER THAN 21	AVERAGE SPEED	TOTAL
N	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NNE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ENE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
E	0.09	0.0	0.0	0.0	0.0	0.0	3.0	0.09
ESE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SE	0.09	0.09	0.0	0.0	0.0	0.0	2.3	0.18
SSE	0.18	0.18	0.0	0.0	0.0	0.0	3.1	0.36
S	0.0	0.09	0.0	0.0	0.0	0.0	3.7	0.09
SSW	0.09	0.0	0.0	0.0	0.0	0.0	2.2	0.09
SW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WSW	0.09	0.09	0.0	0.0	0.0	0.0	2.6	0.18
W	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WNW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NNW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
AVG SPEED	2.1	3.7	0.0	0.0	0.0	0.0		0.0
TOTAL	0.55	0.45	0.0	0.0	0.0	0.0		1.00

RELATIVE FREQUENCY OF OCCURRENCE OF THE E STABILITY CLASS IS 0.37

RELATIVE FREQUENCY OF CALM 0.0

A TOTAL OF 2 SOUNDINGS FROM A SAMPLE OF 32 SOUNDINGS DID NOT HAVE 500 M OF TEMP AND WIND DATA

MONTH: MAY YEAR: 1977. UTAH UAUB SFC TO 500 METERS

NORMALIZED FREQUENCY DISTRIBUTION

DIRECTION	SPEED (METER/SEC) 0-3	4-6	7-10	11-16	17-21	GREATER THAN 21	AVERAGE SPEED	TOTAL
N	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NNE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ENE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ESE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SSW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WSW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
W	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WNW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NNW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
AVG SPEED	0.0	0.0	0.0	0.0	0.0	0.0		0.0
TOTAL	0.0	0.0	0.0	0.0	0.0	0.0		0.0

RELATIVE FREQUENCY OF OCCURRENCE OF THE F STABILITY CLASS IS 0.0

RELATIVE FREQUENCY OF CALM 0.0

A TOTAL OF 2 SOUNDINGS FROM A SAMPLE OF 32 SOUNDINGS DID NOT HAVE 500 M OF TEMP AND WIND DATA

MUNTH: MAY YEAR: 1977. UTAH UAUB SFC TO 500 METERS

NORMALIZED FREQUENCY DISTRIBUTION

DIRECTION	SPEED (METER/SEC) 0-3	4-6	7-10	11-16	17-21	GREATER THAN 21	AVERAGE SPEED	TOTAL
N	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NNE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ENE	0.03	0.0	0.0	0.0	0.0	0.0	1.5	0.03
E	0.03	0.0	0.0	0.0	0.0	0.0	3.0	0.03
ESE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SE	0.03	0.03	0.0	0.0	0.0	0.0	2.3	0.07
SSE	0.10	0.07	0.03	0.03	0.0	0.0	3.1	0.23
S	0.0	0.03	0.10	0.03	0.0	0.0	6.7	0.17
SSW	0.03	0.10	0.07	0.0	0.0	0.0	5.8	0.20
SW	0.0	0.03	0.0	0.0	0.0	0.0	4.3	0.03
WSW	0.03	0.07	0.0	0.0	0.0	0.0	2.9	0.10
W	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
WNW	0.0	0.10	0.0	0.0	0.0	0.0	4.6	0.10
NW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NNW	0.0	0.03	0.0	0.0	0.0	0.0	5.6	0.03
AVG SPEED	2.1	4.3	8.6	13.4	0.0	0.0		0.0
TOTAL	0.27	0.47	0.20	0.07	0.0	0.0		1.00

NORMALIZED FREQUENCY DISTRIBUTION INDEPENDENT OF STABILITY

RELATIVE FREQUENCY OF CALM 0.0

A TOTAL OF 2 SOUNDINGS FROM A SAMPLE OF 32 SOUNDINGS DID NOT HAVE 500 M OF TEMP AND WIND DATA

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4596

DATE 05/01/77 TIME 0511?MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SFC		5.49		0.0		2.1	135.
1.0	150	1735	5.58	0.09	3.15	6.08	3.5	152.
1.8	* 266	1851	5.87		4.98	7.90		
2.0	300	1885	6.42	0.84	6.97	9.90	2.8	191.
2.7	415.	2000.	10.34	3.83	3.09	6.02	2.1	188.
3.3	* 495	2080	11.63		2.00	4.93		
3.3	500	2085	11.63	1.39	2.54	5.47	2.0	159.
4.3	* 607	2232	11.27		1.63	4.56		
5.8	* 876	2461	13.28		0.36	3.29		
6.0	915.	2500.	13.01	1.47	-0.36	2.57	9.5	186.
9.3	1415.	3000.	11.63	-1.46	-1.81	1.12	6.6	182.
15.8	2415.	4000.	4.45	-7.19	-2.05	0.88		
22.4	3415.	5000.	-2.63	-7.08	-3.05	-0.12		
28.2	4415.	6000.	-11.85	-9.22	-3.15	-0.20		

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4596

DATE 05/01/77 TIME 0511?MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	1585.	-1.5	1.5	2.1	135.
0.5	76.	1661.	-3.3	1.5	3.7	115.
1.0	152.	1737.	-1.6	3.1	3.5	153.
1.5	229.	1814.	-0.3	3.1	3.1	175.
2.0	305.	1890.	0.6	2.7	2.8	192.
2.5	381.	1966.	0.6	2.1	2.2	197.
3.0	457.	2042.	-0.1	1.9	1.9	176.
3.5	533.	2118.	-1.2	1.7	2.1	146.
4.0	610.	2195.	-3.6	6.2	7.2	150.
4.5	686.	2271.	-5.8	6.5	8.7	138.
5.0	762.	2347.	-7.8	9.2	12.0	140.
5.5	838.	2423.	-7.5	10.5	12.9	144.
6.0	914.	2499.	-5.3	7.9	9.5	146.
6.5	991.	2576.	-3.7	7.4	8.3	153.
7.0	1067.	2652.	-3.1	8.1	8.6	159.
7.5	1143.	2728.	-2.6	7.9	8.3	162.
8.0	1219.	2804.	-1.6	8.3	8.4	169.
8.5	1295.	2880.	0.3	6.5	6.5	183.
9.0	1372.	2957.	0.5	6.8	6.8	185.
9.5	1448.	3033.	0.1	6.8	6.8	181.
10.0	1524.	3109.	0.0	6.7	6.7	180.
10.5	1600.	3185.	0.1	5.9	5.9	181.
11.0	1676.	3261.	-0.2	6.5	6.5	179.
11.5	1753.	3338.	-0.2	6.4	6.4	178.
12.0	1829.	3414.	-0.5	7.1	7.1	176.

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4594

DATE 05/01/77 TIME 13:51MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SFC		18.38		0.0		7.2	225.
1.0	150	1735	18.52	0.18	0.0	2.93	5.6	209.
2.0	300	1885	17.81	-0.70	+2.64	0.29	4.8	183.
2.7	415.	2000.	16.46	-1.17	-3.91	-0.98	4.4	187.
3.2	500	2085	15.67	-0.98	-4.27	-1.35	4.0	181.
5.5	915.	2500.	12.09	-3.57	-3.44	-0.51	8.9	210.
8.2	1415.	3000.	6.62	-5.47	-3.51	-0.58	8.7	217.
14.7	2415.	4000.	0.83	-5.79	-0.57	2.36		
21.1	3415.	5000.	-3.80	-4.63	-2.10	0.83		
26.5	4415.	6000.	-11.65	-7.86	0.98	3.90		

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4594

DATE 05/01/77 TIME 13:51MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	1585.	5.1	5.1	7.2	225.
0.5	76.	1661.	5.5	5.5	7.8	225.
1.0	152.	1737.	2.4	4.5	5.1	209.
1.5	229.	1814.	1.3	5.5	5.7	193.
2.0	305.	1890.	0.2	4.7	4.7	182.
2.5	388.	1973.	0.6	4.6	4.7	191.
3.0	464.	2049.	0.0	3.9	3.9	180.
3.5	559.	2144.	0.1	4.3	4.3	181.
4.0	656.	2241.	1.4	5.7	5.9	193.
4.5	737.	2322.	2.2	5.0	5.4	204.
5.0	822.	2407.	3.1	5.6	6.5	209.
5.5	916.	2501.	4.5	7.7	8.9	210.
6.0	1008.	2593.	5.2	8.5	9.9	212.
6.5	1105.	2690.	6.3	9.1	11.0	215.
7.0	1207.	2792.	6.7	8.5	10.8	219.
7.5	1304.	2889.	6.7	8.2	10.6	219.
8.0	1387.	2972.	5.3	7.0	8.8	217.
8.5	1463.	3048.	5.1	6.9	8.5	216.
9.0	1546.	3131.	6.6	9.9	12.0	215.
9.5	1622.	3207.	6.4	8.9	10.9	216.
10.0	1698.	3283.	7.8	8.8	11.8	221.
10.5	1774.	3359.	8.9	8.9	12.6	225.
11.0	1851.	3436.	8.9	8.6	12.4	226.
11.5	1927.	3512.	9.4	9.1	13.0	226.
12.0	2003.	3588.	8.5	9.0	12.4	223.

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4592

DATE 05/03/77 TIME 05:16MST ASCENT RATE 500 FPM DATA INTERVAL 1S SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SFC		6.52		0.0		2.1	135.
1.0	150	1735	6.71	0.18	1.48	4.40	0.9	161.
1.8	* 266	1851	6.99		4.04	6.97		
2.0	300	1885	7.36	0.65	7.31	10.24	0.3	117.
2.7	415.	2000.	12.09	4.36	2.17	5.10	0.6	117.
3.0	* 457	2042	12.09		2.17	5.10		
3.3	500	2085	12.09	0.37	0.0	2.93	2.7	132.
6.0	915.	2500.	12.37	0.74	-0.54	2.39	10.6	196.
9.3	1415.	3000.	11.17	-1.65	-2.54	0.39	9.0	212.
15.8	2415.	4000.	5.11	-6.06	-2.04	0.88		
22.4	3415.	5000.	-1.09	-6.20	-1.90	1.03		
29.0	4415.	6000.	-8.89	-7.80	-2.52	0.41		

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4592

DATE 05/03/77 TIME 05:16MST ASCENT RATE 500 FPM DATA INTERVAL 1S SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	1585.	-1.5	1.5	2.1	135.
0.5	76.	1661.	-0.9	1.7	1.9	153.
1.0	152.	1737.	-0.3	0.9	0.9	162.
1.5	229.	1814.	-1.4	-0.1	1.4	87.
2.0	305.	1890.	-0.2	0.1	0.2	119.
2.5	381.	1966.	-0.4	0.4	0.5	131.
3.0	457.	2042.	-0.6	0.1	0.6	99.
3.5	533.	2118.	-1.6	4.0	4.4	158.
4.0	610.	2195.	-3.3	7.1	7.9	155.
4.5	686.	2271.	-1.9	7.7	7.9	166.
5.0	762.	2347.	-0.1	8.5	8.5	180.
5.5	838.	2423.	1.6	10.5	10.6	189.
6.0	914.	2499.	3.0	10.2	10.6	196.
6.5	991.	2576.	3.4	9.8	10.3	199.
7.0	1067.	2652.	4.3	8.9	9.9	206.
7.5	1143.	2728.	4.4	9.2	10.2	205.
8.0	1219.	2804.	4.5	8.5	9.6	208.
8.5	1295.	2880.	4.5	8.3	9.4	209.
9.0	1372.	2957.	4.5	7.8	9.0	210.
9.5	1448.	3033.	5.0	7.5	9.0	213.
10.0	1524.	3109.	5.7	8.3	10.1	214.
10.5	1600.	3185.	6.0	8.0	10.0	217.
11.0	1676.	3261.	6.1	8.3	10.3	216.
11.5	1753.	3338.	6.9	9.3	11.6	217.
12.0	1829.	3414.	7.7	9.9	12.3	218.

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4590

DATE 05/03/77 TIME 13:49MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SFC		21.09		0.0		10.3	135.
1.0	150	1735	21.00	-0.08	1.21	-4.14	9.2	170.
1.9	300	1885	20.22	-0.78	-4.88	-1.95	15.5	179.
2.4	415.	2000.	18.61	-1.59	-3.67	-0.74	23.0	179.
2.9	500	2085	18.34	-0.29	-3.17	-0.24	21.4	183.
5.6	915.	2500.	15.01	-2.78	-1.96	0.97	12.1	188.
8.6	1415.	3000.	10.25	-4.38	-4.18	-1.25	7.3	200.
13.7	2415.	4000.	1.12	-10.06	-3.77	-0.84		
19.4	3415.	5000.	-6.53	-7.65	-1.93	1.00		
25.2	4415.	6000.	-12.05	-5.53	0.78	3.71		

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4590

DATE 05/03/77 TIME 13:49MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	1585.	-7.3	7.3	10.3	135.
0.5	76.	1661.	-3.0	6.6	7.3	155.
1.0	152.	1737.	-1.6	9.2	9.3	170.
1.5	229.	1814.	-0.7	11.4	11.4	177.
2.0	313.	1898.	-0.3	16.3	16.3	179.
2.5	433.	2018.	-0.2	24.2	24.2	179.
3.0	519.	2104.	1.6	20.5	20.6	185.
3.5	598.	2183.	-0.5	19.3	19.3	178.
4.0	674.	2259.	-1.2	17.3	17.4	176.
4.5	750.	2335.	-0.3	17.0	17.0	179.
5.0	826.	2411.	-0.2	17.7	17.7	179.
5.5	903.	2488.	1.6	13.0	13.1	187.
6.0	979.	2564.	1.7	7.2	7.4	193.
6.5	1055.	2640.	1.9	3.1	3.6	211.
7.0	1131.	2716.	2.1	2.7	3.5	218.
7.5	1215.	2800.	2.7	3.5	4.4	217.
8.0	1308.	2893.	2.5	6.2	6.7	202.
8.5	1388.	2973.	2.3	6.8	7.2	199.
9.0	1494.	3079.	2.8	6.9	7.5	202.
9.5	1591.	3176.	3.6	10.0	10.6	200.
10.0	1698.	3283.	4.4	10.9	11.8	202.
10.5	1845.	3430.	5.6	19.5	20.3	196.
11.0	1952.	3537.	7.0	18.0	19.3	201.
11.5	2029.	3614.	6.2	14.2	15.5	204.
12.0	2107.	3692.	5.7	14.9	16.0	201.

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4595

DATE 05/05/77 TIME 05:15MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SFC		0.83		0.0		2.6	90.
1.0	150	1735	1.40	0.57	1.51	4.43	2.2	123.
1.8	* 266	1851	1.50		1.50	4.43		
2.0	300	1885	2.44	1.04	4.68	7.61	3.7	76.
2.7	415.	2000.	4.83	2.19	1.12	4.05	4.2	67.
3.0	* 457	2042	4.83		1.12	4.05		
3.3	500	2085	4.56	-0.08	-0.74	2.18	4.7	73.
6.0	915.	2500.	4.64	0.08	1.12	1.81	1.5	127.
9.3	1415.	3000.	2.74	-1.89	-0.19	2.74	8.7	198.
15.8	2415.	4000.	-1.37	-4.12	-1.52	1.41		
22.0	3415.	5000.	-8.98	-7.61	-3.30	-0.37		
28.0	4415.	6000.	-16.83	-7.85	-3.36	-0.43		

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4595

DATE 05/05/77 TIME 05:15MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	1585.	-2.6	-0.0	2.6	90.
0.5	76.	1661.	-0.5	2.8	2.9	169.
1.0	152.	1737.	-1.8	1.1	2.1	122.
1.5	229.	1814.	-3.1	-0.5	3.2	82.
2.0	305.	1890.	-3.6	-1.0	3.8	75.
2.5	381.	1966.	-3.5	-1.6	3.9	65.
3.0	457.	2042.	-4.2	-1.6	4.5	70.
3.5	533.	2118.	-4.7	-1.3	4.9	75.
4.0	610.	2195.	-4.2	-0.0	4.2	90.
4.5	686.	2271.	-2.0	1.3	2.4	123.
5.0	762.	2347.	-0.6	1.5	1.6	159.
5.5	838.	2423.	-1.0	1.4	1.7	146.
6.0	914.	2499.	-1.2	0.9	1.5	127.
6.5	991.	2576.	-1.1	1.4	1.8	141.
7.0	1067.	2652.	-1.5	2.6	3.0	149.
7.5	1143.	2728.	-1.4	4.0	4.2	160.
8.0	1219.	2804.	-0.4	6.2	6.2	176.
8.5	1295.	2880.	1.1	7.4	7.5	189.
9.0	1372.	2957.	1.9	7.6	7.8	194.
9.5	1448.	3033.	3.3	8.7	9.3	201.
10.0	1524.	3109.	4.5	8.7	9.8	207.
10.5	1600.	3185.	6.0	8.9	10.7	214.
11.0	1676.	3261.	6.8	9.0	11.3	217.
11.5	1753.	3338.	7.4	8.7	11.5	220.
12.0	1829.	3414.	8.1	8.7	11.9	223.

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4393

DATE 05/05/77 TIME 13:50MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SFC		22.36		0.0		10.3	225.
1.0	150	1735	21.73	-0.63	-0.35	2.57	6.2	215.
2.0	300	1885	21.01	-0.72	-1.42	1.51	6.0	191.
2.7	415.	2000.	19.83	-0.81	-3.21	-0.28	5.7	185.
3.3	500	2085	19.07	-1.13	-3.22	-0.30	5.2	194.
5.3	915.	2500.	14.70	-4.33	-6.95	-4.02	12.1	214.
6.9	1415.	3000.	9.92	-4.80	-4.64	-1.72	17.3	213.
12.7	2415.	4000.	3.33	-6.60	-0.76	2.17		
17.4	3415.	5000.	-4.87	-8.20	-1.36	1.57		
23.5	4415.	6000.	-11.04	-6.17	-1.38	1.55		

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4393

DATE 05/05/77 TIME 13:50MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	1585.	7.3	7.3	10.3	225.
0.5	76.	1661.	1.2	5.2	5.3	193.
1.0	152.	1737.	3.6	5.1	6.2	215.
1.5	229.	1814.	3.9	5.3	6.6	216.
2.0	305.	1890.	1.0	5.9	6.0	190.
2.5	381.	1966.	0.2	5.9	5.9	182.
3.0	457.	2042.	0.8	5.4	5.4	188.
3.5	536.	2121.	1.6	4.8	5.0	198.
4.0	629.	2214.	2.5	6.5	6.7	202.
4.5	721.	2306.	3.1	4.7	5.7	213.
5.0	838.	2423.	5.8	8.5	10.3	214.
5.5	984.	2569.	7.4	11.4	13.6	213.
6.0	1153.	2738.	9.2	14.3	17.0	213.
6.5	1314.	2899.	10.9	18.8	21.7	210.
7.0	1434.	3019.	9.2	13.7	16.5	214.
7.5	1562.	3147.	11.4	16.1	19.7	215.
8.0	1692.	3277.	9.3	13.4	16.3	215.
8.5	1778.	3363.	6.9	9.2	11.5	217.
9.0	1854.	3439.	7.1	8.4	11.0	220.
9.5	1930.	3515.	8.7	10.7	13.8	219.
10.0	2009.	3594.	10.6	14.0	17.5	217.
10.5	2085.	3670.	10.8	15.3	18.7	215.
11.0	2162.	3747.	10.9	15.1	18.7	216.
11.5	2238.	3823.	11.1	16.8	20.1	213.
12.0	2314.	3899.	10.2	14.3	17.6	216.

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4591

DATE 05/07/77 TIME 05:08MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SFC		3.79		0.0		2.6	135.
1.0	150	1735	11.34	7.56	5.99	8.92	4.6	147.
1.5	* 228	1813	12.46		2.35	5.28		
2.0	300	1885	12.55	1.21	-0.72	2.21	8.3	183.
2.7	415.	2000.	12.09	-0.46	-0.90	2.02	11.7	180.
3.3	500	2085	11.65	-0.45	-1.63	1.30	15.1	182.
6.0	915.	2500.	8.58	-2.50	-2.20	0.73	16.6	189.
9.3	1415.	3000.	5.68	-3.47	-1.30	1.63	21.6	190.
15.8	2415.	4000.	0.36	-5.32	-1.82	1.61		
22.3	3415.	5000.	-5.64	-6.00	-2.30	0.62		
28.6	4415.	6000.	-11.75	-6.11	-3.12	-0.20		

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4591

DATE 05/07/77 TIME 05:08MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	1585.	-1.8	1.8	2.6	135.
0.5	76.	1661.	-1.8	2.6	3.1	146.
1.0	152.	1737.	-2.6	3.9	4.7	147.
1.5	229.	1814.	-0.3	7.0	7.0	178.
2.0	305.	1890.	0.5	8.4	8.4	183.
2.5	381.	1966.	-0.2	10.7	10.7	179.
3.0	457.	2042.	0.3	13.0	13.0	181.
3.5	533.	2118.	0.7	13.2	13.2	183.
4.0	610.	2195.	1.0	13.5	13.5	184.
4.5	686.	2271.	1.5	15.5	15.6	186.
5.0	762.	2347.	2.2	17.2	17.4	187.
5.5	838.	2423.	2.7	16.0	16.2	190.
6.0	914.	2499.	2.7	16.4	16.6	189.
6.5	991.	2576.	2.4	16.4	16.6	188.
7.0	1067.	2652.	2.3	17.6	17.7	187.
7.5	1143.	2728.	2.8	17.1	17.3	189.
8.0	1219.	2804.	3.0	19.9	20.2	189.
8.5	1295.	2880.	3.8	21.4	21.7	190.
9.0	1372.	2957.	3.7	20.6	20.9	190.
9.5	1448.	3033.	3.6	21.9	22.2	189.
10.0	1524.	3109.	3.6	23.3	23.5	187.
10.5	1600.	3185.	3.2	24.8	25.0	187.
11.0	1676.	3261.	2.9	26.5	26.7	186.
11.5	1753.	3338.	2.6	24.1	24.2	186.
12.0	1829.	3414.	1.5	20.7	20.7	184.

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4589

DATE 05/07/77 TIME 13:57MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SFC		24.14		0.0		8.8	180.
0.7	150	1735	21.65	-2.48	-4.68	-1.75	8.7	171.
1.2	300	1885	19.72	-1.93	-5.42	-2.50	9.5	180.
1.6	415.	2000.	17.62	-1.22	-5.98	-3.05	7.2	188.
1.9	500	2085	17.65	-0.85	-5.98	-3.05	5.8	191.
3.2	915.	2500.	12.64	-4.34	-7.38	-4.45	10.2	170.
4.7	1415.	3000.	7.37	-4.80	-6.81	-3.88	12.0	173.
9.3	2415.	4000.	0.26	-8.25	-0.76	2.17	15.9	165.
15.9	3415.	5000.	-3.02	-3.28	-2.48	0.45		
22.0	4415.	6000.	-8.39	-5.37	-2.13	0.80		

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4589

DATE 05/07/77 TIME 13:57MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	1585.	-0.0	8.8	8.8	180.
0.5	76.	1661.	-1.3	6.5	6.6	169.
1.0	234.	1819.	-1.2	10.9	11.0	174.
1.5	373.	1958.	1.0	7.8	7.9	187.
2.0	515.	2100.	1.1	5.5	5.6	191.
2.5	658.	2243.	-0.0	6.7	6.7	180.
3.0	830.	2415.	-2.2	9.5	9.8	167.
3.5	1023.	2608.	-1.1	10.7	10.7	174.
4.0	1188.	2773.	-1.4	10.3	10.4	172.
4.5	1356.	2941.	-1.1	11.2	11.2	174.
5.0	1547.	3132.	-2.2	13.6	13.8	171.
5.5	1701.	3286.	-3.6	12.9	13.4	164.
6.0	1802.	3387.	-3.6	12.9	13.4	165.
6.5	1888.	3473.	-3.4	11.5	12.0	164.
7.0	1964.	3549.	-3.4	11.3	11.8	163.
7.5	2040.	3625.	-3.5	10.0	10.6	161.
8.0	2157.	3742.	-4.1	13.8	14.4	163.
8.5	2286.	3871.	-3.8	15.8	16.2	166.
9.0	2362.	3947.	-3.8	14.5	15.0	165.
9.5	2438.	4023.	-4.2	15.7	16.3	165.
10.0	2514.	4099.	-5.0	17.1	17.8	164.
10.5	2591.	4176.	-4.9	17.4	18.0	164.
11.0	2667.	4252.	-5.4	18.9	19.6	164.
11.5	2743.	4328.	-4.6	19.1	19.6	166.
12.0	2819.	4404.	-6.2	18.4	19.4	161.

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4587

DATE 05/09/77 TIME 05:06MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SFC		10.71		0.0		1.0	90.
1.0	150	1735	13.01	2.30	2.52	5.44	1.2	92.
2.0	300	1885	15.10	2.09	2.15	5.07	4.1	118.
2.0	* 304	1889	15.10		2.15	5.07		
2.7	415.	2000.	15.01	+0.08	-0.36	2.57	7.0	139.
3.3	500	2085	14.84	+0.17	-0.36	2.57	7.5	152.
6.0	915.	2500.	12.46	-1.83	-2.16	0.77	9.6	174.
9.3	1415.	3000.	9.32	-3.69	-3.11	-0.18	10.3	168.
15.8	2415.	4000.	2.74	-6.59	-0.75	2.18		
22.3	3415.	5000.	-3.99	-6.73	-2.30	0.63		
28.7	4415.	6000.	-10.76	-6.77	-2.92	0.01		

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4587

DATE 05/09/77 TIME 05:06MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	1585.	-1.0	-0.0	1.0	90.
0.5	76.	1661.	-0.8	0.8	1.1	137.
1.0	152.	1737.	-1.2	0.0	1.2	91.
1.5	229.	1814.	-1.8	-0.4	1.9	76.
2.0	305.	1890.	-3.7	2.2	4.2	121.
2.5	381.	1966.	-4.9	4.7	6.8	134.
3.0	457.	2042.	-4.3	6.0	7.4	145.
3.5	533.	2118.	-2.9	7.0	7.5	158.
4.0	610.	2195.	-2.5	8.0	8.4	162.
4.5	686.	2271.	-2.2	8.2	8.5	165.
5.0	762.	2347.	-1.6	8.8	9.0	170.
5.5	838.	2423.	-1.5	9.3	9.5	171.
6.0	914.	2499.	-1.0	9.6	9.6	174.
6.5	991.	2576.	-0.8	9.7	9.7	175.
7.0	1067.	2652.	-1.0	9.8	9.9	174.
7.5	1143.	2728.	-1.5	10.4	10.5	172.
8.0	1219.	2804.	-1.6	9.4	9.6	171.
8.5	1295.	2880.	-1.9	9.8	10.0	169.
9.0	1372.	2957.	-2.0	9.6	9.8	168.
9.5	1453.	3038.	-2.1	10.5	10.7	168.
10.0	1530.	3115.	-1.8	9.8	10.0	170.
10.5	1606.	3191.	-1.7	10.0	10.2	170.
11.0	1687.	3272.	-1.0	10.0	10.0	175.
11.5	1764.	3349.	-1.0	9.9	10.0	174.
12.0	1841.	3426.	0.0	9.1	9.1	180.

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4585

DATE 05/09/77 TIME 13:51MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SFC		23.53		0.0		11.8	135.
0.9	150	1735	21.38	-2.15	-3.81	-0.88	9.2	162.
1.7	300	1885	19.52	-1.86	-1.57	1.36	11.9	166.
2.4	415.	2000.	19.23	-0.29	-0.52	2.40	14.1	168.
2.9	500	2085	19.22	-0.01	-1.58	1.35	19.6	159.
5.7	915.	2500.	17.45	-1.69	-0.18	2.75	25.8	157.
8.9	1415.	3000.	16.64	-0.90	-1.60	1.33	35.2	163.
15.5	2415.	4000.	14.83	-1.81	-1.07	1.86		
22.0	3415.	5000.	13.19	-1.64	0.90	3.83		
27.5	4415.	6000.	5.02	-8.17	-0.56	2.37		

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4585

DATE 05/09/77 TIME 13:51MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	1585.	-8.4	8.4	11.8	135.
0.5	76.	1661.	-3.4	6.8	7.6	154.
1.0	169.	1754.	-2.7	9.3	9.7	164.
1.5	270.	1855.	-3.2	11.1	11.5	164.
2.0	356.	1941.	-1.8	12.4	12.6	172.
2.5	432.	2017.	-3.4	14.2	14.6	167.
3.0	509.	2094.	-7.4	18.8	20.2	159.
3.5	585.	2170.	-8.2	21.1	22.7	159.
4.0	661.	2246.	-7.9	24.0	25.3	162.
4.5	737.	2322.	-6.6	22.2	23.2	163.
5.0	813.	2398.	-8.5	22.8	24.4	160.
5.5	890.	2475.	-10.0	22.9	25.0	156.
6.0	966.	2551.	-10.6	25.2	27.4	157.
6.5	1042.	2627.	-11.6	27.9	30.2	157.
7.0	1118.	2703.	-10.9	27.5	29.6	158.
7.5	1194.	2779.	-10.9	30.1	32.0	160.
8.0	1271.	2856.	-10.1	33.4	34.9	163.
8.5	1347.	2932.	-12.1	36.0	38.0	161.
9.0	1423.	3008.	-10.2	33.4	34.9	163.
9.5	1499.	3084.	-9.1	28.4	29.8	162.
10.0	1575.	3160.	-9.3	29.3	30.8	162.
10.5	1652.	3237.	-6.8	22.4	23.4	163.
11.0	1728.	3313.	-10.5	30.4	32.1	161.
11.5	1804.	3389.	-7.7	22.5	23.8	161.
12.0	1880.	3465.	-10.0	32.1	33.6	163.

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4583

DATE 05/11/77 TIME 05:03MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SFC		-1.57		0.0		2.1	120.
1.0	150	1735	2.35	3.92	3.39	6.32	3.0	170.
2.0	300	1885	4.06	1.71	4.67	7.60	1.9	145.
2.7	415.	2000.	4.54	0.48	-0.75	2.18	3.3	137.
3.3	500	2085	4.08	-0.47	-1.30	1.62	4.5	147.
6.0	915.	2500.	1.31	-2.28	-3.01	-0.08	4.5	186.
9.3	1415.	3000.	-1.67	-3.45	-2.47	0.46	5.9	180.
15.7	2415.	4000.	-9.87	-8.22	-1.17	1.76		
22.2	3415.	5000.	-13.64	-3.77	-2.35	0.57		
28.3	4415.	6000.	-21.68	-8.04	-1.00	1.93		

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4583

DATE 05/11/77 TIME 05:03MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	1585.	-1.8	1.0	2.1	120.
0.5	76.	1661.	-2.1	4.3	4.8	154.
1.0	152.	1737.	-0.5	2.9	3.0	171.
1.5	229.	1814.	0.8	0.9	1.2	220.
2.0	305.	1890.	-1.2	1.5	1.9	140.
2.5	381.	1966.	-2.2	2.1	3.0	135.
3.0	457.	2042.	-2.3	2.9	3.7	141.
3.5	533.	2118.	-2.4	4.5	5.1	152.
4.0	610.	2195.	-1.5	5.9	6.1	165.
4.5	686.	2271.	-0.7	5.3	5.4	172.
5.0	762.	2347.	-0.1	5.2	5.2	179.
5.5	838.	2423.	0.5	4.9	5.0	186.
6.0	914.	2499.	0.5	4.5	4.5	186.
6.5	995.	2580.	0.9	5.2	5.3	190.
7.0	1072.	2657.	1.1	4.9	5.0	193.
7.5	1148.	2733.	1.2	4.7	4.8	195.
8.0	1224.	2809.	0.7	4.6	4.7	189.
8.5	1300.	2885.	0.1	5.2	5.2	182.
9.0	1377.	2962.	0.1	5.6	5.6	181.
9.5	1453.	3038.	-0.0	6.1	6.1	180.
10.0	1532.	3117.	0.2	6.9	6.9	181.
10.5	1611.	3196.	0.6	7.7	7.7	184.
11.0	1691.	3276.	0.5	8.6	8.6	184.
11.5	1772.	3357.	0.8	8.9	8.9	186.
12.0	1849.	3434.	1.1	8.0	8.1	188.

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4581

DATE 05/11/77 TIME 13:50MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SFC		21.96		0.0		11.3	180.
0.7	150	1735	18.63	-3.34	-3.86	-0.93	7.0	176.
1.3	300	1885	17.34	-1.29	-2.82	0.11	11.8	179.
2.0	415.	2000.	15.28	-1.34	-5.34	-2.42	10.3	182.
2.4	500	2085	15.30	-0.70	-5.34	-2.42	9.4	182.
4.7	915.	2500.	12.74	-2.84	-1.08	1.84	14.6	190.
8.0	1415.	3000.	9.32	-3.14	-2.56	0.37	15.9	180.
14.5	2415.	4000.	5.11	-4.21	-1.86	1.07		
20.2	3415.	5000.	-3.50	-8.61	-4.96	-2.03		
25.5	4415.	6000.	-11.36	-7.86	-1.36	1.56		

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4581

DATE 05/11/77 TIME 13:50MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	1585.	-0.0	11.3	11.3	180.
0.5	76.	1661.	-0.4	3.6	3.6	174.
1.0	245.	1830.	-0.3	11.3	11.3	178.
1.5	338.	1923.	-0.2	11.5	11.5	179.
2.0	415.	2000.	0.3	10.3	10.3	182.
2.5	514.	2099.	0.3	9.3	9.3	182.
3.0	650.	2235.	1.6	12.2	12.3	188.
3.5	731.	2316.	1.8	10.5	10.7	190.
4.0	807.	2392.	2.0	11.1	11.2	190.
4.5	883.	2468.	2.8	13.3	13.6	192.
5.0	960.	2545.	2.3	15.9	16.0	188.
5.5	1036.	2621.	1.8	12.5	12.6	188.
6.0	1112.	2697.	2.2	12.4	12.6	190.
6.5	1188.	2773.	2.5	16.2	16.4	189.
7.0	1264.	2849.	2.8	14.2	14.4	189.
7.5	1341.	2926.	1.7	12.4	12.6	188.
8.0	1417.	3002.	-0.2	15.9	15.9	179.
8.5	1493.	3078.	2.3	18.3	18.5	187.
9.0	1569.	3154.	3.6	21.6	21.9	189.
9.5	1645.	3230.	3.6	23.8	24.0	189.
10.0	1722.	3307.	3.6	26.3	26.6	188.
10.5	1798.	3383.	3.7	26.3	26.6	188.
11.0	1874.	3459.	2.9	19.2	19.4	189.
11.5	1950.	3535.	3.1	19.9	20.2	189.
12.0	2026.	3611.	0.4	24.8	24.8	181.

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4588

DATE 05/13/77 TIME 05:02MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SFC		7.18		0.0		2.6	120.
1.0	150	1735	9.97	2.79	1.28	8.21	3.7	134.
2.0	300	1885	10.25	0.28	0.36	3.29	3.5	155.
2.7	415.	2000.	10.25	0.0	-0.36	2.56	3.1	175.
3.3	500	2085	10.07	-0.19	-0.91	2.02	3.8	180.
6.0	915.	2500.	8.02	-1.67	-1.84	1.09	5.4	206.
9.3	1415.	3000.	5.11	-3.27	-2.23	0.70	8.3	200.
15.8	2415.	4000.	-0.15	-5.25	-0.95	1.98		
22.0	3415.	5000.	-6.23	-6.11	-1.54	1.39		
28.4	4415.	6000.	-14.84	-8.60	-2.55	0.37		

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4588

DATE 05/13/77 TIME 05:02MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	1585.	-2.2	1.3	2.6	120.
0.5	76.	1661.	-2.3	3.0	4.3	148.
1.0	152.	1737.	-2.7	2.5	3.7	134.
1.5	229.	1814.	-2.9	1.2	3.3	137.
2.0	305.	1890.	-1.4	2.5	3.5	156.
2.5	381.	1966.	-0.3	2.9	3.0	174.
3.0	457.	2042.	-0.2	3.3	3.3	177.
3.5	533.	2118.	0.1	3.7	3.5	182.
4.0	610.	2195.	1.3	3.7	3.9	199.
4.5	686.	2271.	1.6	3.9	4.3	206.
5.0	762.	2347.	1.6	3.7	4.0	204.
5.5	838.	2423.	2.8	3.6	4.5	214.
6.0	914.	2499.	3.9	3.8	5.4	226.
6.5	991.	2576.	4.2	4.7	6.3	222.
7.0	1067.	2652.	4.2	5.9	7.2	215.
7.5	1143.	2728.	4.4	6.1	7.6	218.
8.0	1219.	2804.	3.6	6.0	7.2	213.
8.5	1295.	2880.	3.8	6.3	7.2	208.
9.0	1372.	2957.	3.1	7.1	8.3	202.
9.5	1448.	3033.	2.5	7.8	8.2	198.
10.0	1524.	3109.	2.7	8.9	9.3	197.
10.5	1600.	3185.	3.4	10.6	11.1	198.
11.0	1676.	3261.	4.9	12.6	13.5	201.
11.5	1753.	3338.	5.9	12.0	13.4	206.
12.0	1829.	3414.	6.3	11.0	12.7	210.

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4586

DATE 05/13/77 TIME 13:52MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LARSE	WS M/S	WD DEG
	SFC		21.23		0.0		1.5	120.
0.8	150	1735	18.55	-2.68	-3.14	-0.21	3.0	158.
1.7	300	1885	18.14	-0.40	-0.35	2.58	3.3	167.
2.5	415.	2000.	17.43	-0.71	-3.51	-0.58	2.5	147.
3.0	500	2085	16.36	-1.08	-3.52	-0.60	0.4	94.
4.6	915.	2500.	10.63	-4.32	-5.41	-2.48	3.1	189.
7.3	1415.	3000.	9.71	-2.32	-3.64	-0.71	6.0	159.
13.2	2415.	4000.	1.27	-8.46	-3.75	-0.82		
19.5	3415.	5000.	-2.09	-3.36	-3.79	-0.86		
23.9	4415.	6000.	-10.87	-8.78	-3.88	-0.95		

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4586

DATE 05/13/77 TIME 13:52MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	1585.	-1.3	0.8	1.5	120.
0.5	76.	1661.	-1.1	1.4	1.8	144.
1.0	184.	1769.	-1.0	3.5	3.6	164.
1.5	262.	1847.	-0.6	3.3	3.4	170.
2.0	338.	1923.	-0.9	3.1	3.2	164.
2.5	421.	2006.	-1.4	2.0	2.4	145.
3.0	504.	2089.	-0.4	0.0	0.4	92.
3.5	589.	2174.	0.5	0.3	0.6	244.
4.0	743.	2328.	1.0	1.7	2.0	209.
4.5	879.	2464.	0.7	2.4	2.5	195.
5.0	1016.	2601.	-0.7	4.8	4.9	172.
5.5	1133.	2718.	-1.0	4.1	4.2	167.
6.0	1209.	2794.	-1.1	3.8	4.0	165.
6.5	1285.	2870.	-1.7	4.9	5.2	161.
7.0	1361.	2946.	-2.1	5.3	5.7	159.
7.5	1456.	3041.	-2.2	5.9	6.3	160.
8.0	1546.	3131.	-1.7	5.8	6.0	164.
8.5	1622.	3207.	-1.4	4.0	4.3	160.
9.0	1698.	3283.	-1.6	4.2	4.5	160.
9.5	1774.	3359.	-1.5	4.2	4.4	160.
10.0	1851.	3436.	-1.1	6.3	6.4	170.
10.5	1927.	3512.	-1.1	5.1	5.2	168.
11.0	2003.	3588.	-1.0	4.4	4.6	167.
11.5	2079.	3664.	-0.8	4.3	4.4	169.
12.0	2155.	3740.	-1.2	5.4	5.5	167.

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4584

DATE 05/15/77 TIME 05:02MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SFC		8.21		0.0		5.1	235.
1.0	150	1735	8.39	0.19	0.0	2.93	4.6	193.
2.0	300	1885	7.65	-0.75	-2.76	0.17	4.0	206.
2.7	415.	2000.	5.87	-1.12	-2.78	0.15	5.7	204.
3.2	500	2085	5.50	-0.94	-2.04	0.89	6.5	230.
5.9	915.	2500.	1.98	-3.60	-3.19	-0.26	10.9	252.
9.2	1415.	3000.	-1.76	-3.27	-2.66	0.27	9.8	277.
15.2	2415.	4000.	-9.37	-8.09	-4.08	-1.15		
21.2	3415.	5000.	-15.34	-5.96	-2.36	0.57		

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4584

DATE 05/15/77 TIME 05:02MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	1585.	4.2	3.0	5.1	235.
0.5	76.	1661.	-0.9	4.2	4.3	168.
1.0	152.	1737.	1.1	4.5	4.6	193.
1.5	229.	1814.	3.0	2.6	4.3	235.
2.0	305.	1890.	3.7	1.6	4.0	247.
2.5	381.	1966.	4.6	2.7	5.3	240.
3.0	468.	2053.	5.9	2.2	6.3	250.
3.5	544.	2129.	6.5	2.4	6.9	250.
4.0	620.	2205.	6.5	2.2	6.9	251.
4.5	698.	2283.	7.6	1.7	7.7	250.
5.0	775.	2360.	7.6	4.1	8.9	243.
5.5	851.	2436.	8.9	3.3	9.5	250.
6.0	927.	2512.	10.7	3.3	11.2	253.
6.5	1006.	2591.	10.3	1.9	10.5	259.
7.0	1082.	2667.	9.9	0.9	9.9	265.
7.5	1158.	2743.	9.5	0.6	9.3	266.
8.0	1234.	2819.	9.1	0.2	9.1	269.
8.5	1311.	2896.	8.3	-0.8	8.3	276.
9.0	1387.	2972.	9.1	-1.1	9.1	277.
9.5	1463.	3048.	10.8	-1.4	10.9	278.
10.0	1545.	3130.	11.7	-1.6	11.8	278.
10.5	1627.	3212.	12.3	-2.5	12.5	282.
11.0	1703.	3288.	12.1	-3.0	12.5	284.
11.5	1779.	3364.	12.6	-4.0	13.2	287.
12.0	1867.	3452.	15.4	-3.4	15.8	283.

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4582

DATE 05/15/77 TIME 1353MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SFC		20.38		0.0		2.6	270.
0.7	150	1735	18.29	-2.09	-6.53	-3.61	3.6	275.
1.1	300	1885	15.85	-2.45	-6.23	-3.30	3.5	279.
1.5	415.	2000.	15.47	-0.37	-6.23	-3.30	2.2	281.
1.7	500	2085	14.22	-1.25	-7.36	-4.43	1.8	287.
3.1	915.	2500.	10.07	-3.79	-5.49	-2.56	2.2	322.
5.1	1415.	3000.	4.48	-5.59	-4.65	-1.73	0.7	264.
10.7	2415.	4000.	-3.18	-7.97	-2.29	0.64	9.2	208.
15.6	3415.	5000.	-12.80	-9.73	0.59	3.51		
22.0	4415.	6000.	-17.55	-4.70	-2.37	0.55		

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4582

DATE 05/15/77 TIME 1353MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	1585.	2.6	0.0	2.6	270.
0.5	76.	1661.	3.6	-0.1	3.6	272.
1.0	248.	1833.	4.0	-0.6	4.1	279.
1.5	432.	2017.	1.9	-0.4	2.0	281.
2.0	584.	2169.	1.5	-0.7	1.7	295.
2.5	758.	2343.	3.7	-2.1	4.2	300.
3.0	898.	2483.	1.4	-1.8	2.3	323.
3.5	988.	2573.	1.3	-1.3	1.9	315.
4.0	1132.	2717.	0.3	-0.2	0.4	307.
4.5	1274.	2859.	0.3	-0.6	0.7	337.
5.0	1394.	2979.	0.2	0.4	0.5	204.
5.5	1519.	3104.	0.8	1.7	1.9	206.
6.0	1630.	3215.	0.6	2.5	2.5	193.
6.5	1758.	3343.	1.8	2.6	3.1	214.
7.0	1854.	3439.	2.5	3.8	4.5	213.
7.5	1930.	3515.	2.1	5.4	5.8	201.
8.0	2006.	3591.	1.8	6.2	6.5	196.
8.5	2082.	3667.	2.7	6.5	7.0	202.
9.0	2159.	3744.	3.6	7.6	8.4	205.
9.5	2235.	3820.	3.6	8.0	8.8	205.
10.0	2311.	3896.	3.7	7.5	8.2	207.
10.5	2387.	3972.	4.2	7.9	9.0	208.
11.0	2463.	4048.	4.3	8.5	9.5	207.
11.5	2540.	4125.	4.2	8.8	9.7	206.
12.0	2616.	4201.	4.5	8.9	10.0	207.

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4580

DATE 05/17/77 TIME 05:00MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SFC		2.74		0.0		2.6	130.
1.0	150	1735	1.22	-1.52	-3.01	-0.08	M	M
2.0	300	1885	0.63	-0.59	-1.13	1.79	M	M
2.7	415.	2000.	-0.51	-1.14	-3.03	-0.10	M	M
3.3	500	2085	-1.64	-1.14	-3.04	-0.11	M	M
5.8	915.	2500.	-5.15	-3.51	-1.34	1.58	M	M
9.0	1415.	3000.	-7.90	-2.75	-1.16	1.77	M	M
15.4	2415.	4000.	-15.94	-8.04	-3.55	-0.62		
19.5	3415.	5000.	-26.16	-10.22	-4.02	-1.09		

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4580

DATE 05/17/77 TIME 05:00MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	1585.	-2.6	1.7	2.6	130.

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4578

DATE 05/17/77 TIME 13:55MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SFC		12.09		0.0		5.1	330.
0.9	150	1735	9.90	-2.19	-1.64	1.29	6.5	318.
1.9	300	1885	8.98	-0.92	-2.93	-0.00	5.2	324.
2.6	415.	2000.	7.37	-1.48	-0.92	2.01	5.9	320.
3.1	500	2085	7.81	0.32	-1.29	1.64	5.1	314.
5.7	915.	2500.	3.79	-3.92	-2.42	0.50	4.2	307.
8.9	1415.	3000.	2.55	-1.34	-2.25	0.68	8.9	209.
15.1	2415.	4000.	-4.96	-7.51	-2.49	0.43		
20.8	3415.	5000.	-13.53	-8.58	-4.11	-1.18		
26.4	4415.	6000.	-19.86	-6.33	-4.37	-1.44		

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4578

DATE 05/17/77 TIME 13:55MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	1585.	2.6	-4.5	5.1	330.
0.5	76.	1661.	3.8	-3.6	5.2	313.
1.0	170.	1755.	4.5	-5.2	6.9	319.
1.5	246.	1831.	3.2	-4.3	5.3	322.
2.0	322.	1907.	3.0	-4.3	5.2	325.
2.5	407.	1992.	3.9	-4.6	6.0	320.
3.0	484.	2069.	3.8	-3.9	4.9	315.
3.5	561.	2146.	4.5	-3.7	5.9	309.
4.0	639.	2224.	3.6	-2.0	4.1	299.
4.5	717.	2302.	4.2	-1.8	4.5	294.
5.0	806.	2391.	4.7	-2.9	5.6	302.
5.5	891.	2476.	3.9	-2.9	4.9	307.
6.0	968.	2553.	2.1	-1.6	2.6	308.
6.5	1044.	2629.	1.7	-0.1	1.7	273.
7.0	1120.	2705.	1.4	1.5	2.0	224.
7.5	1196.	2781.	3.9	2.1	4.4	242.
8.0	1272.	2857.	6.4	3.9	7.5	239.
8.5	1349.	2934.	5.6	6.3	8.5	222.
9.0	1425.	3010.	4.1	8.0	9.0	207.
9.5	1501.	3086.	0.5	9.8	9.8	183.
10.0	1577.	3162.	-1.3	9.9	10.0	173.
10.5	1653.	3238.	-1.0	10.6	10.6	175.
11.0	1730.	3315.	-1.2	11.6	11.6	174.
11.5	1806.	3391.	-2.0	13.2	13.3	171.
12.0	1882.	3467.	-2.0	14.8	14.9	172.

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4576

DATE 05/19/77 TIME 04:58MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
.	SFC		-1.24		0.0		3.1	130.
1.0	150	1735	0.25	1.53	4.90	7.82	7.8	158.
2.0	300	1885	1.98	1.73	-1.31	1.61	3.2	183.
2.7	415.	2000.	1.79	-0.19	-1.13	1.80	1.7	210.
3.3	500	2085	1.16	-0.63	-2.82	0.10	1.7	223.
6.0	915.	2500.	-1.86	-3.02	-2.47	0.45	2.7	254.
9.2	1415.	3000.	-6.72	-4.08	-3.66	-0.73	7.1	237.
15.2	2415.	4000.	-13.04	-7.10	-3.92	-0.99		
21.6	3415.	5000.	-17.85	-4.81	-1.98	0.95		

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4576

DATE 05/19/77 TIME 04:58MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	1585.	-2.4	2.0	3.1	130.
0.5	76.	1661.	-1.9	4.9	5.3	159.
1.0	152.	1737.	-3.0	7.5	7.9	158.
1.5	229.	1814.	-1.8	4.9	5.2	160.
2.0	305.	1890.	0.2	3.1	3.1	184.
2.5	381.	1966.	0.9	1.8	2.0	206.
3.0	457.	2042.	0.8	1.1	1.4	216.
3.5	533.	2118.	1.5	1.1	1.9	229.
4.0	615.	2200.	1.8	1.9	2.6	223.
4.5	691.	2276.	2.1	2.3	3.1	223.
5.0	767.	2352.	1.8	2.1	2.8	221.
5.5	843.	2428.	2.0	2.5	3.0	221.
6.0	919.	2504.	1.9	2.0	2.7	224.
6.5	996.	2581.	2.7	3.0	4.0	222.
7.0	1072.	2657.	3.6	3.0	4.7	230.
7.5	1148.	2733.	4.6	3.8	5.9	230.
8.0	1224.	2809.	4.9	4.3	6.5	229.
8.5	1300.	2885.	5.4	4.2	6.8	232.
9.0	1377.	2962.	6.0	4.0	7.2	236.
9.5	1457.	3042.	5.9	3.8	7.0	237.
10.0	1565.	3150.	7.0	4.7	8.4	236.
10.5	1666.	3251.	7.0	4.1	8.2	240.
11.0	1755.	3340.	6.5	3.7	7.5	241.
11.5	1832.	3417.	6.6	4.5	8.0	236.
12.0	1908.	3493.	5.9	4.0	7.1	236.

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4574

DATE 05/19/77 TIME 13:52MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SFC		16.19		0.0		5.1	335.
0.8	150	1735	13.30	-2.88	-1.62	1.31	3.7	296.
1.7	300	1885	13.01	-0.29	-0.18	2.75	6.2	304.
2.5	415.	2000.	12.92	-0.10	-1.08	1.85	7.0	308.
3.0	500	2085	12.09	-0.82	-0.90	2.02	7.8	302.
5.7	915.	2500.	9.51	-1.93	-2.19	0.74	5.8	279.
8.9	1415.	3000.	9.23	-0.93	1.28	4.21	29.5	315.
15.4	2415.	4000.	6.71	-2.52	-1.48	1.45		
21.7	3415.	5000.	2.93	-3.78	-1.87	1.06		
28.2	4415.	6000.	-0.22	-3.16	-1.14	1.79		

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4574

DATE 05/19/77 TIME 13:52MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	1585.	2.2	-4.7	5.1	335.
0.5	76.	1661.	3.1	-0.1	3.1	271.
1.0	194.	1779.	3.1	-2.6	4.1	310.
1.5	270.	1855.	5.6	-3.4	6.5	301.
2.0	346.	1931.	4.5	-3.6	5.8	308.
2.5	422.	2007.	5.6	-4.3	7.1	308.
3.0	499.	2084.	6.7	-4.1	7.9	302.
3.5	575.	2160.	2.9	-2.0	3.5	305.
4.0	651.	2236.	4.0	-4.6	6.1	319.
4.5	727.	2312.	7.4	-6.5	9.9	311.
5.0	803.	2388.	9.3	-7.3	11.8	308.
5.5	880.	2465.	6.6	0.6	6.6	265.
6.0	965.	2550.	4.1	-2.2	4.6	298.
6.5	1045.	2630.	2.6	-5.8	6.4	336.
7.0	1121.	2706.	4.4	-5.3	6.9	320.
7.5	1203.	2788.	5.8	-5.9	8.3	315.
8.0	1280.	2865.	11.7	-11.3	16.3	314.
8.5	1356.	2941.	18.5	-16.5	24.8	312.
9.0	1432.	3017.	21.5	-22.1	30.8	316.
9.5	1508.	3093.	20.0	-21.7	29.5	317.
10.0	1584.	3169.	22.6	-16.1	27.7	306.
10.5	1661.	3246.	27.6	-24.7	37.0	312.
11.0	1737.	3322.	26.4	-26.7	37.5	315.
11.5	1813.	3398.	20.6	-24.2	31.7	320.
12.0	1889.	3474.	17.6	-16.7	24.3	314.

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4579

DATE 05/21/77 TIME 05:02MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SFC		2.08		0.0		2.6	135.
1.0	150	1735	3.70	1.62	0.0	2.93	5.3	168.
2.0	300	1885	4.48	0.75	0.19	3.11	7.0	231.
2.7	415.	2000.	4.07	-0.28	-0.93	2.00	8.6	267.
3.3	500	2085	3.72	-0.45	-1.31	1.62	9.2	283.
6.0	915.	2500.	0.64	-3.06	-1.70	1.23	8.9	345.
9.3	1415.	3000.	-1.47	-2.12	-2.28	0.65	10.0	347.
15.6	2415.	4000.	-10.17	-8.71	-2.53	0.40		
22.1	3415.	5000.	-13.14	-2.97	-1.76	1.17		
28.6	4415.	6000.	-17.85	-4.71	-3.96	-1.03		

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4579

DATE 05/21/77 TIME 05:02MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	1585.	-1.8	1.8	2.6	135.
0.5	76.	1661.	-1.6	3.6	4.0	157.
1.0	152.	1737.	-1.0	5.2	5.3	169.
1.5	229.	1814.	0.4	2.3	2.3	190.
2.0	305.	1890.	1.6	1.1	2.0	234.
2.5	381.	1966.	3.6	0.6	3.7	260.
3.0	457.	2042.	3.5	-0.3	3.5	275.
3.5	533.	2118.	2.7	-0.9	2.9	289.
4.0	610.	2195.	2.8	-3.9	4.8	325.
4.5	686.	2271.	1.5	-4.4	4.6	341.
5.0	762.	2347.	2.8	-6.4	6.8	340.
5.5	838.	2423.	2.6	-8.1	8.5	343.
6.0	914.	2499.	2.3	-8.6	8.9	345.
6.5	991.	2576.	3.2	-8.8	9.4	340.
7.0	1067.	2652.	4.0	-9.3	10.1	337.
7.5	1143.	2728.	5.0	-11.3	12.3	336.
8.0	1219.	2804.	4.6	-11.8	12.6	339.
8.5	1295.	2880.	3.7	-11.1	11.7	342.
9.0	1372.	2957.	2.8	-10.3	10.7	345.
9.5	1448.	3033.	1.9	-9.4	9.6	348.
10.0	1534.	3119.	2.5	-10.7	11.0	347.
10.5	1613.	3198.	2.0	-9.9	10.1	348.
11.0	1690.	3275.	2.9	-9.2	9.7	343.
11.5	1766.	3351.	3.8	-8.6	9.4	336.
12.0	1842.	3427.	17.9	-0.4	17.9	271.

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4575

DATE 05/21/77 TIME 13:52MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SFC		20.03		0.0		2.1	45.
0.7	150	1735	15.71	+4.32	+5.34	-2.42	1.6	84.
1.0	300	1885	14.20	-1.51	+3.05	-0.12	3.3	63.
1.6	415.	2000.	13.10	-0.45	+3.96	-1.03	2.1	88.
2.1	500	2085	12.84	+0.91	+5.43	-2.50	0.5	75.
3.5	915.	2500.	8.30	+4.52	+7.52	-4.59	2.7	235.
4.9	1415.	3000.	3.50	+4.82	+4.29	-1.37	2.7	260.
11.1	2415.	4000.	-2.05	-5.56	-0.95	1.98	6.7	310.
17.1	3415.	5000.	-8.99	-6.94	-1.75	1.18		
23.3	4415.	6000.	-15.33	-6.35	-4.52	-1.60		

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4575

DATE 05/21/77 TIME 13:52MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	1585.	-1.5	-1.5	2.1	45.
0.5	76.	1661.	-0.6	-1.0	1.2	33.
1.0	293.	1878.	-3.0	-1.8	3.5	64.
1.5	402.	1987.	-1.7	-1.8	2.5	43.
2.0	479.	2064.	-0.4	-0.1	0.4	71.
2.5	598.	2183.	-1.8	0.1	1.2	93.
3.0	752.	2337.	-1.9	-1.6	2.5	49.
3.5	933.	2518.	2.6	0.7	2.7	256.
4.0	1124.	2709.	2.6	0.1	2.6	267.
4.5	1310.	2895.	3.2	0.5	3.3	261.
5.0	1459.	3044.	2.8	0.5	2.9	259.
5.5	1559.	3144.	2.9	0.0	2.9	269.
6.0	1644.	3229.	1.2	-1.1	1.7	314.
6.5	1720.	3305.	0.4	-0.7	0.8	331.
7.0	1797.	3382.	1.0	-0.1	1.0	276.
7.5	1873.	3458.	1.8	-1.4	2.0	314.
8.0	1949.	3534.	2.5	-4.4	5.1	331.
8.5	2025.	3610.	2.3	-4.4	4.9	333.
9.0	2101.	3686.	3.0	-4.3	5.5	321.
9.5	2178.	3763.	4.4	-4.8	6.5	318.
10.0	2254.	3839.	5.3	-3.9	6.6	306.
10.5	2330.	3915.	5.1	-4.0	6.5	308.
11.0	2406.	3991.	5.1	-4.2	6.6	310.
11.5	2482.	4067.	5.4	-5.5	7.7	315.
12.0	2559.	4144.	5.7	-5.9	8.3	316.

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4573

DATE 05/23/77 TIME 04:55MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SFC		12.09		0.0		1.0	135.
1.0	150	1735	13.92	1.83	0.54	3.47	5.3	162.
2.0	300	1885	14.65	0.72	1.25	4.18	6.2	185.
2.7	415.	2000.	14.83	0.00	0.0	2.93	11.5	191.
3.3	500	2085	14.65	0.0	-0.54	2.39	14.5	192.
6.0	915.	2500.	12.55	-1.82	-1.80	1.12	12.8	217.
9.3	1415.	3000.	9.79	-3.04	-2.19	0.70	13.7	218.
15.8	2415.	4000.	2.55	-7.24	-1.87	1.05		
21.6	3415.	5000.	-4.77	-7.33	-1.34	1.58		
28.1	4415.	6000.	-10.86	-6.09	-2.53	0.40		

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4573

DATE 05/23/77 TIME 04:55MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	1585.	-0.7	0.7	1.0	135.
0.5	76.	1661.	-0.6	1.7	1.8	161.
1.0	152.	1737.	-1.7	5.1	5.4	162.
1.5	229.	1814.	0.8	4.2	4.3	191.
2.0	305.	1890.	0.5	6.3	6.3	185.
2.5	381.	1966.	1.9	9.9	10.1	191.
3.0	457.	2042.	2.4	13.0	13.2	190.
3.5	533.	2118.	3.8	15.1	15.5	194.
4.0	610.	2195.	4.9	15.1	15.8	198.
4.5	686.	2271.	6.2	14.9	16.1	203.
5.0	762.	2347.	6.9	12.8	14.5	208.
5.5	838.	2423.	7.3	10.2	12.5	216.
6.0	914.	2499.	7.6	10.5	12.8	217.
6.5	991.	2576.	7.8	10.5	13.1	217.
7.0	1067.	2652.	8.4	10.6	13.5	219.
7.5	1143.	2728.	7.9	9.7	12.5	219.
8.0	1219.	2804.	7.9	9.9	12.6	219.
8.5	1295.	2880.	8.4	9.8	12.9	221.
9.0	1372.	2957.	8.9	11.4	14.5	218.
9.5	1448.	3033.	8.1	10.4	13.2	218.
10.0	1524.	3109.	7.7	10.8	13.3	216.
10.5	1610.	3195.	7.6	12.7	14.8	211.
11.0	1690.	3275.	7.4	12.1	14.2	211.
11.5	1766.	3351.	6.1	12.4	13.8	206.
12.0	1843.	3428.	6.1	12.6	14.0	206.

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4801

DATE 05/23/77 TIME 13:50MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SFC		22.40		0.0		11.3	180.
1.0	150	1735	21.09	-1.31	-0.86	2.06	17.2	197.
2.0	300	1885	21.17	0.09	0.17	3.10	61.6	199.
2.7	415.	2000.	21.09	-0.09	-0.69	2.24	M	M
3.3	500	2085	20.66	-0.43	-2.08	0.85	M	M
6.0	915.	2500.	18.70	-1.96	-1.58	1.35	M	M
9.3	1415.	3000.	15.93	-2.76	-4.09	-1.16	M	M
15.5	2415.	4000.	8.58	-7.35	-4.59	-1.66		
21.8	3415.	5000.	3.22	-5.37	-0.37	2.55		
28.3	4415.	6000.	-0.60	-3.82	-2.08	0.84		

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4801

DATE 05/23/77 TIME 13:50MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	1585.	-0.0	11.3	11.3	180.
0.5	76.	1661.	2.9	11.7	12.1	194.
1.0	152.	1737.	5.2	16.6	17.4	198.
1.5	229.	1814.	11.4	34.6	36.5	198.
2.0	305.	1890.	21.1	59.6	63.3	200.

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4792

DATE 05/25/77 TIME 04:53MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SFC		9.79		0.0		3.1	135.
1.0	150	1735	8.96	-0.83	-2.20	0.73	6.0	154.
2.0	300	1885	7.74	-1.21	-1.65	1.27	10.2	155.
2.7	415.	2000.	6.90	-0.47	-1.66	1.27	11.7	162.
3.3	500	2085	6.52	-0.75	-2.59	0.34	11.6	164.
6.0	915.	2500.	3.66	-2.83	-3.17	-0.24	10.2	193.
9.2	1415.	3000.	0.45	-3.05	-1.13	1.80	14.2	197.
15.8	2415.	4000.	-4.38	-5.02	-2.11	0.82		
22.2	3415.	5000.	-13.64	-9.26	-2.94	-0.01		
28.6	4415.	6000.	-21.68	-8.04	-3.59	-0.66		

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4792

DATE 05/25/77 TIME 04:53MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	1585.	-2.2	2.2	3.1	135.
0.5	76.	1661.	-1.1	2.9	3.1	160.
1.0	152.	1737.	-2.7	5.4	6.1	154.
1.5	229.	1814.	-2.8	7.4	8.0	159.
2.0	305.	1890.	-4.4	9.4	10.4	155.
2.5	381.	1966.	-3.8	10.8	11.4	161.
3.0	457.	2042.	-3.3	11.5	12.0	164.
3.5	533.	2118.	-3.1	10.8	11.2	164.
4.0	610.	2195.	-2.2	10.1	10.4	168.
4.5	688.	2273.	-0.7	10.1	10.1	176.
5.0	764.	2349.	0.2	11.5	11.5	181.
5.5	840.	2425.	1.8	10.7	10.9	190.
6.0	916.	2501.	2.2	10.0	10.2	193.
6.5	997.	2582.	3.1	10.5	11.0	196.
7.0	1073.	2658.	4.1	9.0	9.9	204.
7.5	1149.	2734.	4.6	10.6	11.6	204.
8.0	1226.	2811.	5.2	11.7	12.8	204.
8.5	1302.	2887.	5.1	11.8	12.9	204.
9.0	1378.	2963.	4.2	13.3	13.9	198.
9.5	1454.	3039.	4.2	13.8	14.4	197.
10.0	1530.	3115.	3.8	15.9	16.4	193.
10.5	1607.	3192.	3.8	15.1	15.6	194.
11.0	1683.	3268.	3.2	14.0	14.4	193.
11.5	1759.	3344.	2.6	14.5	14.7	190.
12.0	1835.	3420.	2.8	14.9	15.2	191.

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4810

DATE 05/25/77 TIME 13:51MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SFC		17.80		0.0		7.7	225.
0.8	150	1735	15.20	-2.61	-2.67	0.26	11.3	222.
1.8	300	1885	14.00	-1.20	-3.94	-1.01	9.8	217.
2.8	415.	2000.	13.01	-0.94	-3.78	-0.85	10.1	214.
3.8	500	2085	12.03	-1.03	-3.61	-0.69	10.2	214.
4.3	915.	2500.	7.10	-4.93	-9.22	-6.29	M	M
5.8	1415.	3000.	2.66	-4.44	-10.00	-7.40	M	M
7.9	2415.	4000.	-7.40	-10.05	-7.15	-4.22	M	M
13.1	3415.	5000.	-13.33	-5.94	-5.48	-2.56		
17.7	4415.	6000.	-16.84	-3.51	-6.92	-3.99		

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4810

DATE 05/25/77 TIME 13:51MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	1585.	5.5	5.5	7.7	225.
0.5	96.	1661.	3.0	4.6	5.5	213.
1.0	182.	1767.	10.0	9.6	13.8	226.
1.5	258.	1843.	9.2	10.0	13.6	223.
2.0	335.	1920.	3.6	5.7	6.7	212.
2.5	444.	2029.	6.3	9.3	11.2	214.
3.0	549.	2134.	5.1	7.8	9.3	213.
3.5	641.	2226.	6.2	8.4	10.5	216.
4.0	785.	2370.	4.7	6.2	7.8	217.

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4803

DATE 05/27/77 TIME 04:52MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SFC		7.21		0.0		3.6	180.
1.0	150	1735	7.74	0.47	0.0	2.93	3.1	252.
2.0	300	1885	7.28	-0.46	-1.47	1.45	3.4	256.
2.7	415.	2000.	6.43	-0.57	-1.66	1.26	2.7	233.
3.3	500	2085	5.90	-0.81	-1.30	1.63	3.0	253.
4.0	915.	2500.	4.45	-1.26	-2.05	0.88	3.4	227.
9.3	1415.	3000.	1.12	-3.51	-2.07	0.86	12.5	250.
15.6	2415.	4000.	-6.72	-7.85	-2.89	0.04		
21.9	3415.	5000.	-15.64	-8.92	-3.94	-1.01		
28.3	4415.	6000.	-18.65	-3.02	-1.59	1.34		

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4803

DATE 05/27/77 TIME 04:52MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	1585.	-0.0	2.6	2.6	180.
0.5	76.	1661.	0.0	-0.0	0.0	270.
1.0	152.	1737.	2.8	0.9	2.9	252.
1.5	229.	1814.	2.7	2.1	3.4	232.
2.0	305.	1890.	3.1	2.1	3.7	236.
2.5	381.	1966.	2.1	1.6	2.7	233.
3.0	457.	2042.	2.1	1.7	2.7	232.
3.5	533.	2118.	2.7	1.9	3.3	234.
4.0	610.	2195.	3.4	2.3	4.0	236.
4.5	686.	2271.	3.5	2.4	4.3	235.
5.0	762.	2347.	4.5	3.5	5.8	232.
5.5	838.	2423.	5.4	4.5	7.0	230.
6.0	914.	2499.	6.2	5.2	8.4	227.
6.5	991.	2576.	6.6	5.7	8.7	230.
7.0	1069.	2654.	7.1	6.1	9.3	229.
7.5	1145.	2730.	7.7	6.8	10.3	229.
8.0	1221.	2806.	7.8	7.2	10.7	227.
8.5	1298.	2883.	8.8	7.9	11.8	228.
9.0	1374.	2959.	9.5	8.3	12.6	229.
9.5	1450.	3035.	9.7	7.9	12.5	231.
10.0	1526.	3111.	10.3	9.1	13.7	229.
10.5	1602.	3187.	9.5	8.0	12.4	230.
11.0	1679.	3264.	10.3	9.9	14.2	226.
11.5	1755.	3340.	10.6	9.6	14.2	228.
12.0	1831.	3416.	21.7	5.0	22.3	257.

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4802

DATE 05/27/77 TIME 12:59MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SFC		19.14		0.0		9.3	270.
0.9	150	1735	16.68	-2.46	-1.59	1.34	4.2	173.
1.7	300	1885	15.59	-1.09	-5.17	-2.24	4.3	221.
2.1	415.	2000.	13.65	-1.57	-3.42	-0.49	6.3	220.
2.5	500	2085	13.66	-0.36	-3.42	-0.49	7.8	227.
4.1	915.	2500.	8.21	-4.50	-5.14	-2.21	7.8	252.
6.6	1415.	3000.	4.66	-4.51	-1.12	1.81	8.2	261.
13.1	2415.	4000.	0.78	-3.91	-2.26	0.66		
19.7	3415.	5000.	-6.13	-6.87	-2.11	0.81		
25.9	4415.	6000.	-13.54	-7.41	-3.33	-0.41		

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4802

DATE 05/27/77 TIME 12:59MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	1585.	9.3	0.0	9.3	270.
0.5	76.	1661.	-1.2	3.8	4.0	162.
1.0	177.	1762.	-0.2	4.2	4.2	177.
1.5	253.	1838.	2.3	2.5	3.4	223.
2.0	377.	1962.	3.5	4.5	5.7	217.
2.5	511.	2096.	5.9	5.2	8.0	228.
3.0	607.	2192.	6.4	3.5	7.3	241.
3.5	734.	2319.	6.4	4.4	7.8	236.
4.0	872.	2457.	5.7	4.4	7.2	232.
4.5	1016.	2601.	7.4	5.6	9.3	233.
5.0	1151.	2736.	8.6	4.7	9.8	241.
5.5	1254.	2839.	7.8	2.5	8.2	253.
6.0	1331.	2916.	7.4	1.0	7.4	263.
6.5	1407.	2992.	8.1	1.3	8.2	261.
7.0	1483.	3068.	8.0	0.8	8.0	264.
7.5	1559.	3144.	8.7	0.9	8.7	264.
8.0	1635.	3220.	8.4	2.1	8.7	256.
8.5	1712.	3297.	6.6	2.3	7.0	251.
9.0	1788.	3373.	5.1	2.3	5.6	246.
9.5	1864.	3449.	4.2	3.0	5.1	235.
10.0	1940.	3525.	4.6	4.6	6.5	225.
10.5	2016.	3601.	4.5	6.1	7.6	216.
11.0	2093.	3678.	5.2	6.3	8.2	220.
11.5	2169.	3754.	4.5	6.5	7.9	215.
12.0	2245.	3830.	5.5	7.9	9.6	215.

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4812

DATE 05/29/77 TIME 04:51MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SFC		1.98		0.0		1.5	135.
1.0	150	1735	4.62	2.64	3.35	6.28	0.7	116.
2.0	300	1885	5.49	0.86	0.37	3.50	3.1	262.
2.7	415.	2000.	5.39	0.09	-0.19	2.74	3.3	256.
3.3	500	2085	5.48	-0.10	1.48	4.41	1.9	247.
4.0	915.	2500.	4.83	-0.53	-2.23	0.70	2.7	151.
4.3	1415.	3000.	2.08	-2.87	-1.69	1.24	2.0	175.
15.5	2415.	4000.	-5.25	-7.33	-4.03	-1.10		
21.5	3415.	5000.	-13.80	-8.59	-2.16	0.77		
28.0	4415.	6000.	-18.30	-4.50	-2.57	0.35		

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4812

DATE 05/29/77 TIME 04:51MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	1585.	-1.1	1.1	1.5	135.
0.5	76.	1661.	-0.9	1.5	1.8	148.
1.0	152.	1737.	-0.6	0.3	0.7	115.
1.5	229.	1814.	1.0	0.5	1.1	245.
2.0	305.	1890.	3.3	0.4	3.3	264.
2.5	381.	1966.	4.0	0.9	4.1	257.
3.0	457.	2042.	2.3	0.6	2.4	254.
3.5	533.	2118.	1.3	0.7	1.5	241.
4.0	610.	2195.	0.9	1.3	1.6	214.
4.5	686.	2271.	1.2	1.7	2.1	215.
5.0	762.	2347.	0.2	2.4	2.4	186.
5.5	838.	2423.	-0.8	2.2	2.2	169.
6.0	914.	2499.	-1.3	2.0	2.4	151.
6.5	991.	2576.	-2.0	1.8	2.7	144.
7.0	1067.	2652.	-2.5	1.7	3.1	142.
7.5	1143.	2728.	-3.2	1.3	3.4	135.
8.0	1219.	2804.	-3.2	0.9	3.3	133.
8.5	1295.	2880.	-2.4	2.2	3.3	133.
9.0	1372.	2957.	-1.0	1.7	2.0	150.
9.5	1448.	3033.	0.5	1.9	1.9	194.
10.0	1524.	3109.	1.8	2.5	3.1	216.
10.5	1600.	3185.	3.7	2.5	4.5	236.
11.0	1676.	3261.	5.2	1.7	5.9	242.
11.5	1753.	3338.	6.0	3.0	6.7	243.
12.0	1829.	3414.	6.1	3.5	7.1	240.

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4809

DATE 05/29/77 TIME 13:50MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SFC		21.96		0.0		3.6	315.
0.9	150	1735	19.65	-2.31	-1.05	1.88	9.5	286.
1.8	300	1885	18.50	-1.15	-4.03	-1.11	7.9	292.
2.8	415.	2000.	17.45	-1.03	-4.41	-1.48	4.2	101.
3.8	500	2085	16.82	-0.64	-3.72	-0.79	3.0	157.
5.0	915.	2500.	12.83	-4.00	-1.44	1.49	0.8	256.
8.1	1415.	3000.	8.67	-3.48	-5.31	-2.38	5.2	180.
14.0	2415.	4000.	4.16	-5.18	0.75	3.67		
19.9	3415.	5000.	-3.70	-7.86	-6.70	-3.78		
25.9	4415.	6000.	-11.65	-7.95	-3.33	-0.40		

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4809

DATE 05/29/77 TIME 13:50MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	1585.	2.6	-2.5	3.6	315.
0.5	76.	1661.	4.2	-0.7	4.3	279.
1.0	172.	1757.	10.5	-3.5	11.1	289.
1.5	248.	1833.	6.7	-2.5	7.2	290.
2.0	344.	1929.	7.9	-3.4	8.6	294.
2.5	448.	2033.	-0.4	-2.2	2.2	11.
3.0	549.	2134.	3.3	-1.7	3.7	298.
3.5	642.	2227.	0.4	-0.1	0.4	286.
4.0	735.	2320.	1.7	-1.0	2.0	301.
4.5	832.	2417.	1.2	-1.4	1.8	320.
5.0	916.	2501.	0.7	0.2	0.8	255.
5.5	992.	2577.	0.8	0.4	0.9	241.
6.0	1068.	2653.	0.7	1.4	1.6	207.
6.5	1145.	2730.	1.6	2.9	3.3	209.
7.0	1221.	2806.	1.3	3.5	3.7	200.
7.5	1300.	2885.	0.4	4.1	4.1	185.
8.0	1390.	2975.	0.0	4.9	4.9	180.
8.5	1497.	3082.	-0.1	6.4	6.4	179.
9.0	1620.	3205.	0.6	8.1	8.1	185.
9.5	1711.	3296.	1.6	7.9	8.1	192.
10.0	1788.	3373.	3.5	7.6	8.4	205.
10.5	1868.	3453.	3.9	8.7	9.5	204.
11.0	1953.	3538.	4.2	10.4	11.2	202.
11.5	2029.	3614.	5.4	8.7	10.2	212.
12.0	2105.	3690.	5.2	9.4	10.8	209.

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4806

DATE 05/31/77 TIME 04:48MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SFC		8.39		0.0		3.1	135.
1.0	150	1735	12.26	3.87	6.53	9.46	5.2	164.
2.0	300	1885	12.65	0.39	-0.36	2.57	3.3	184.
2.7	415.	2000.	12.64	-0.00	0.36	3.29	3.6	198.
3.5	500	2085	12.82	0.17	0.72	3.65	3.6	174.
6.0	915.	2500.	12.92	0.11	-1.08	1.85	1.2	59.
8.3	1415.	3000.	10.07	-2.86	-1.64	1.29	3.3	182.
15.8	2415.	4000.	4.93	-5.14	-1.86	1.07		
22.4	3415.	5000.	-1.86	-6.78	-2.09	0.84		
28.9	4415.	6000.	-8.59	-6.73	-2.52	0.41		

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4806

DATE 05/31/77 TIME 04:48MST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	1585.	-2.8	2.2	3.1	135.
0.5	76.	1661.	-1.7	5.1	5.5	152.
1.0	152.	1737.	-1.5	5.0	5.2	164.
1.5	229.	1814.	-1.0	4.2	4.3	167.
2.0	305.	1890.	0.3	3.2	3.2	185.
2.5	381.	1966.	1.0	3.2	3.5	203.
3.0	457.	2042.	0.7	3.6	3.7	192.
3.5	533.	2118.	-1.2	3.3	3.6	160.
4.0	610.	2195.	-3.7	2.2	4.3	121.
4.5	686.	2271.	-4.4	0.5	4.4	96.
5.0	762.	2347.	-4.3	-1.1	4.5	75.
5.5	838.	2423.	-2.6	-1.0	2.8	70.
6.0	914.	2499.	-1.0	-0.6	1.2	59.
6.5	991.	2576.	-0.2	0.0	0.2	97.
7.0	1067.	2652.	0.5	0.7	0.8	213.
7.5	1143.	2728.	0.2	1.6	1.7	188.
8.0	1219.	2804.	0.2	2.4	2.4	185.
8.5	1295.	2880.	0.2	2.9	2.9	183.
9.0	1372.	2957.	0.0	2.2	2.2	180.
9.5	1448.	3033.	0.2	2.4	2.4	183.
10.0	1524.	3109.	0.7	2.5	2.6	193.
10.5	1600.	3185.	1.6	2.3	3.1	211.
11.0	1676.	3261.	2.3	1.8	3.0	232.
11.5	1753.	3338.	2.8	0.4	2.8	263.
12.0	1829.	3414.	3.7	-0.2	3.7	273.

UTAH UAUB ELEV 1585 METERS SOUNDING ID 4793

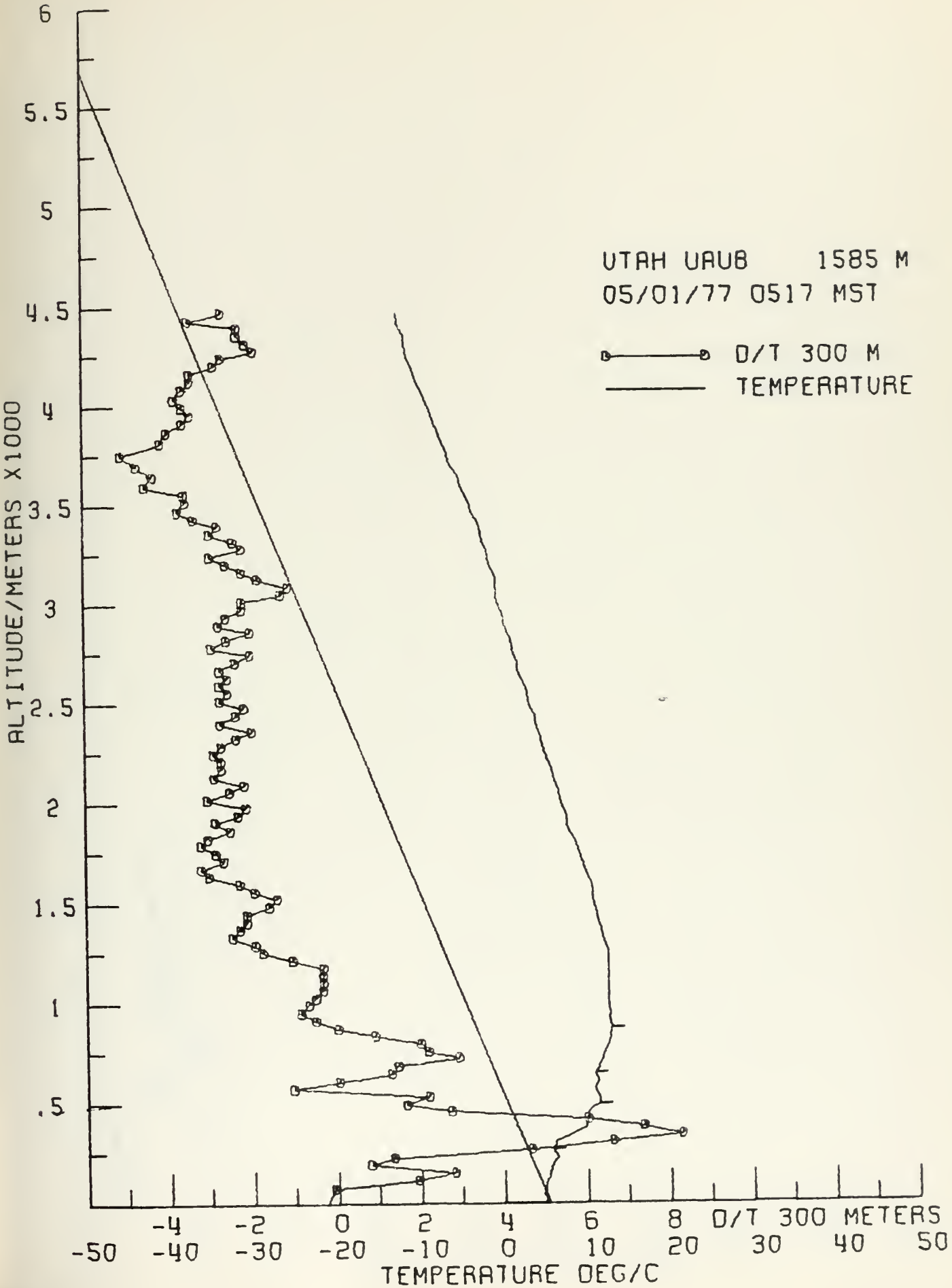
DATE 05/31/77 TIME 1315OMST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

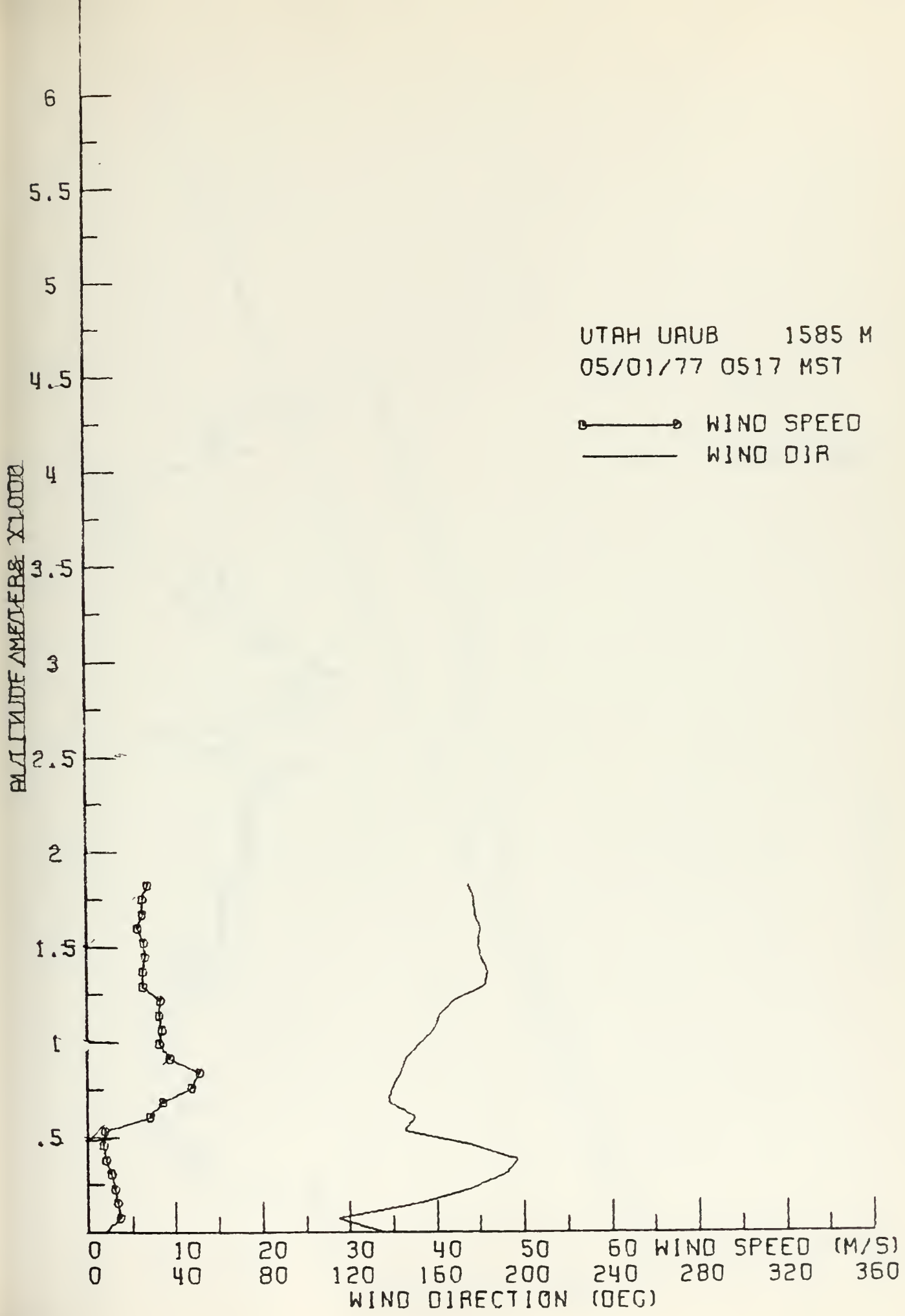
TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	TEMP DEG C	D/T STD	D/T 300M	D/T LAPSE	WS M/S	WD DEG
	SFC		26.29		0.0		2.6	225.
0.9	150	1735	23.66	-2.62	-2.22	0.71	3.9	217.
1.8	300	1885	22.84	-0.83	-0.34	2.58	2.8	252.
2.5	415.	2000.	22.05	-0.66	-2.76	0.17	4.7	236.
3.1	500	2085	21.88	-0.29	-1.55	1.37	3.4	269.
5.8	915.	2500.	21.00	-0.89	-1.04	1.89	1.2	268.
9.1	1415.	3000.	18.70	-1.87	0.0	2.93	3.4	322.
15.7	2415.	4000.	18.52	-0.62	0.18	3.10		
22.2	3415.	5000.	15.56	-2.96	0.0	2.93		
28.8	4415.	6000.	13.92	-1.63	-2.33	0.60		

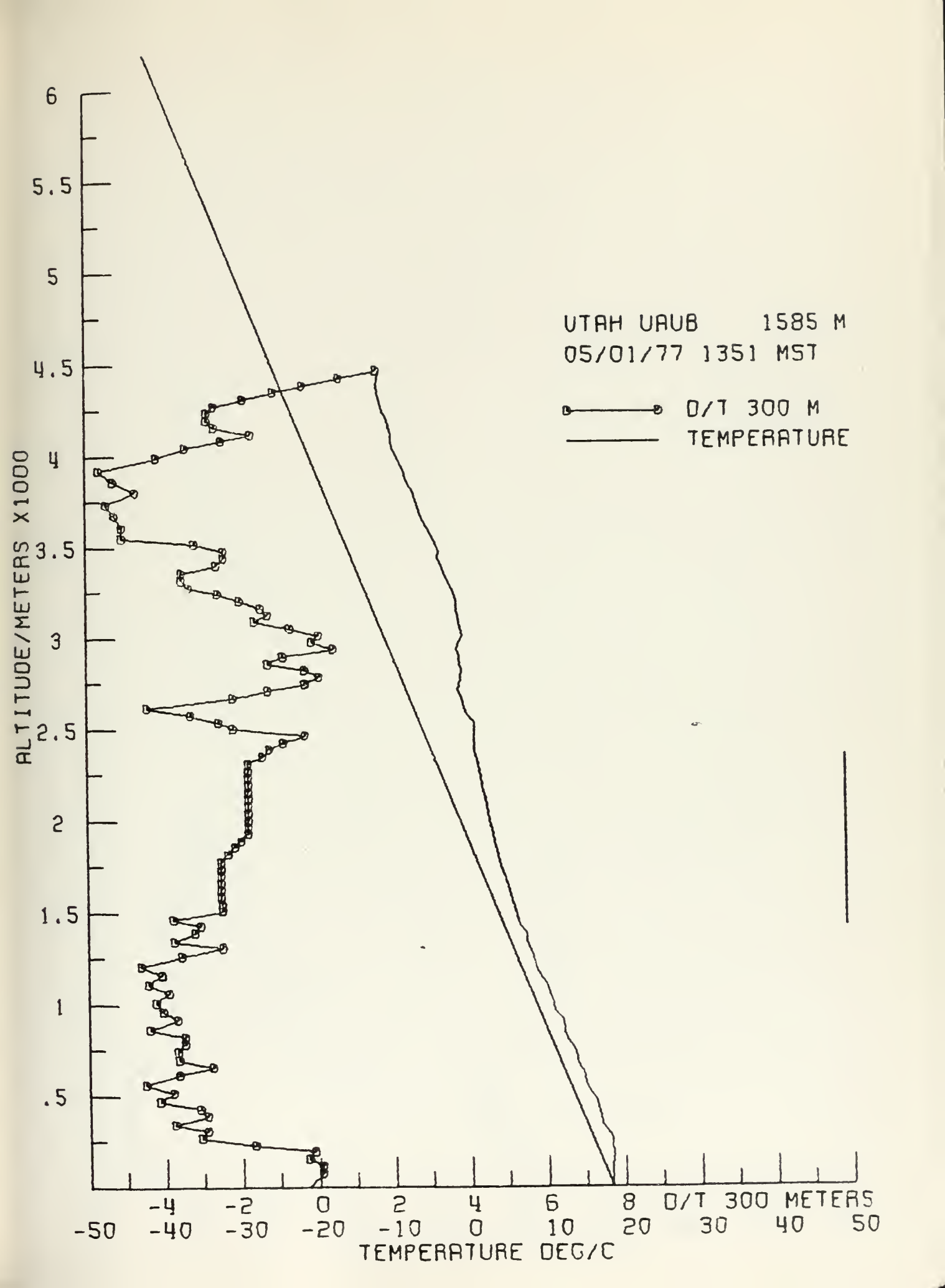
UTAH UAUB ELEV 1585 METERS SOUNDING ID 4793

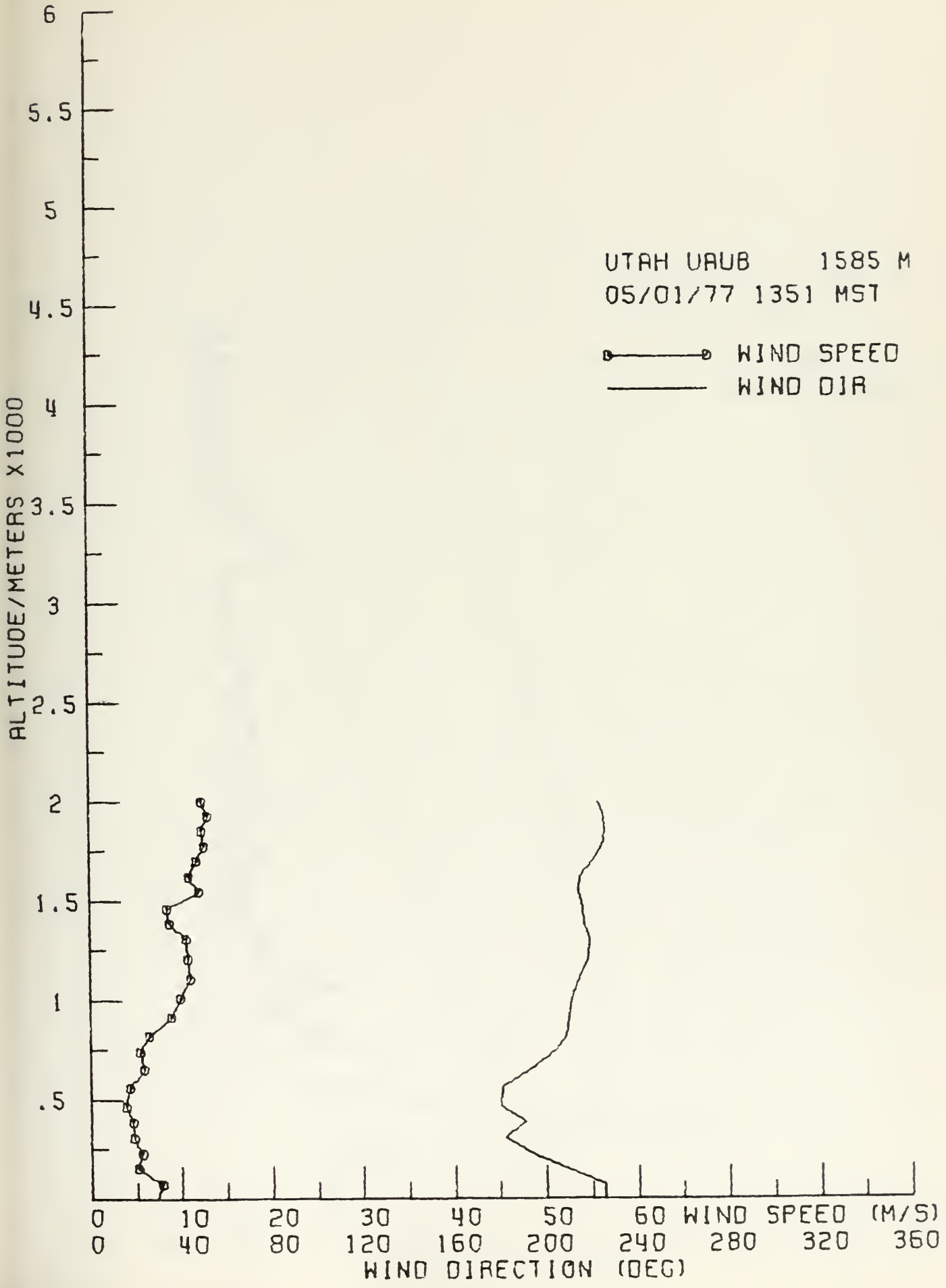
DATE 05/31/77 TIME 1315OMST ASCENT RATE 500 FPM DATA INTERVAL 15 SEC.

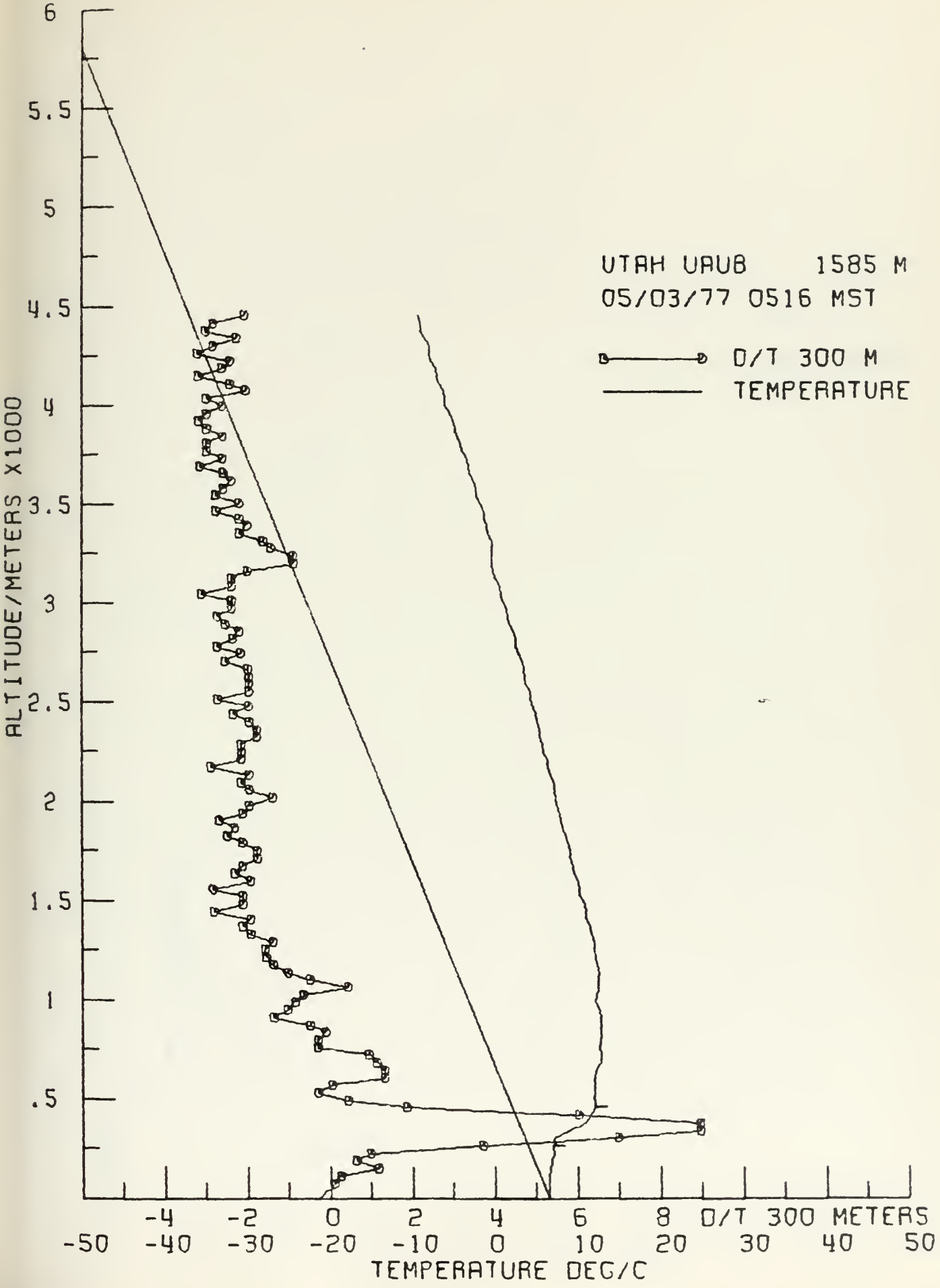
TIME MIN	HEIGHT M (AGL)	HEIGHT M (MSL)	U-COMP M/S	V-COMP M/S	WND SPEED M/S	WND DIR DEG
0.0	0.	1585.	1.8	1.8	2.6	225.
0.5	76.	1661.	1.2	2.6	2.9	205.
1.0	181.	1766.	4.1	1.5	4.4	250.
1.5	257.	1842.	2.4	0.[illegible]	2.4	265.
2.0	333.	1918.	2.8	1.[illegible]	3.2	242.
2.5	410.	1995.	3.8	2.[illegible]	4.7	234.
3.0	486.	2071.	3.7	0.[illegible]	3.8	258.
3.5	562.	2147.	1.1	-1.[illegible]	1.7	320.
4.0	638.	2223.	2.6	-0.[illegible]	2.7	286.
4.5	714.	2299.	2.5	-0.[illegible]	2.6	290.
5.0	791.	2376.	2.4	-0.[illegible]	2.5	290.
5.5	867.	2452.	2.0	-0.4	2.1	282.
6.0	943.	2528.	0.6	0.1	0.6	260.
6.5	1019.	2604.	0.1	-0.[illegible]	0.1	269.
7.0	1095.	2680.	0.1	0.2	0.3	209.
7.5	1172.	2757.	0.1	0.[illegible]	0.1	227.
8.0	1248.	2833.	0.4	-1.[illegible]	1.3	340.
8.5	1324.	2909.	0.5	-2.[illegible]	2.3	347.
9.0	1400.	2985.	1.8	-2.[illegible]	3.4	327.
9.5	1476.	3061.	2.7	-1.[illegible]	3.1	300.
10.0	1553.	3138.	0.5	-2.[illegible]	2.8	349.
10.5	1629.	3214.	-0.1	-3.[illegible]	3.5	1.
11.0	1705.	3290.	3.3	-3.[illegible]	5.0	319.
11.5	1781.	3366.	5.0	-7.[illegible]	7.9	338.
12.0	1857.	3442.	5.9	-5.2	7.9	312.

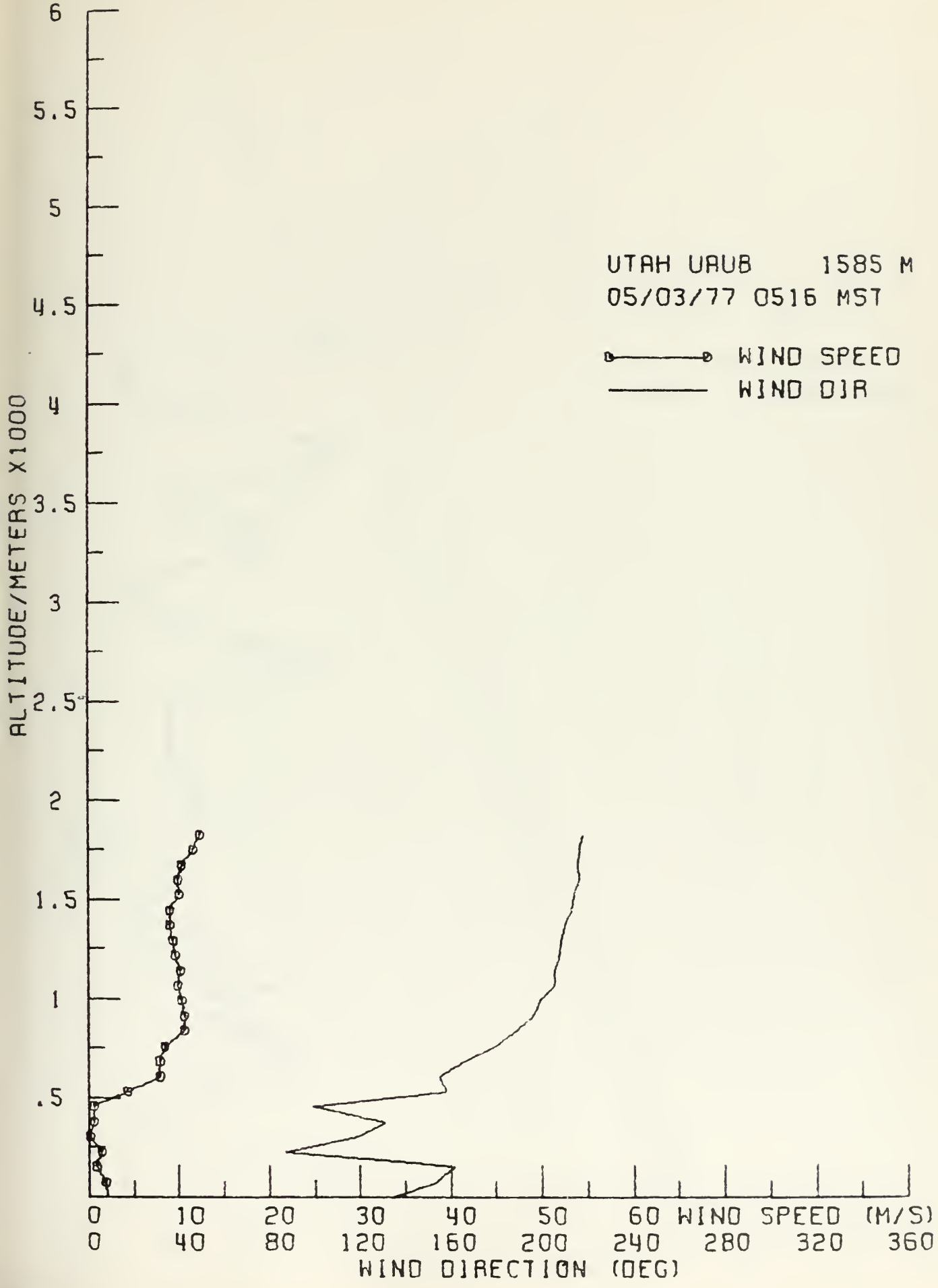

UTAH UAUB 1585 M
05/01/77 0517 MST
D/T 300 M
TEMPERATURE
ALTITUDE/METERS X1000
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
-4 -2 0 2 4 6 8 D/T 300 METERS
-50 -40 -30 -20 -10 0 10 20 30 40 50
TEMPERATURE DEG/C

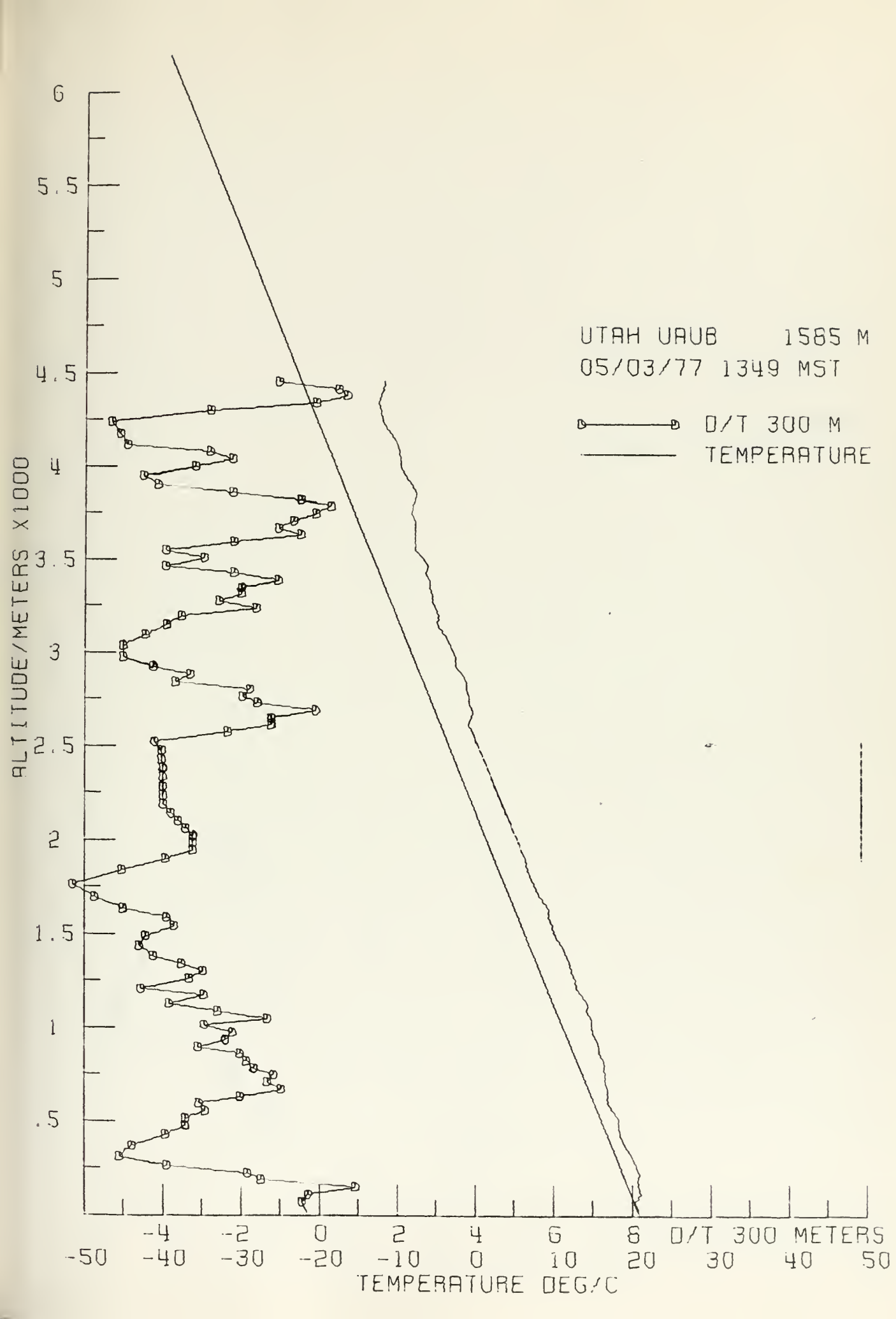

UTAH UAUB 1585 M
05/01/77 0517 MST
WIND SPEED
WIND DIR
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
0 10 20 30 40 50 60 WIND SPEED (M/S)
0 40 80 120 160 200 240 280 320 360
WIND DIRECTION (DEG)

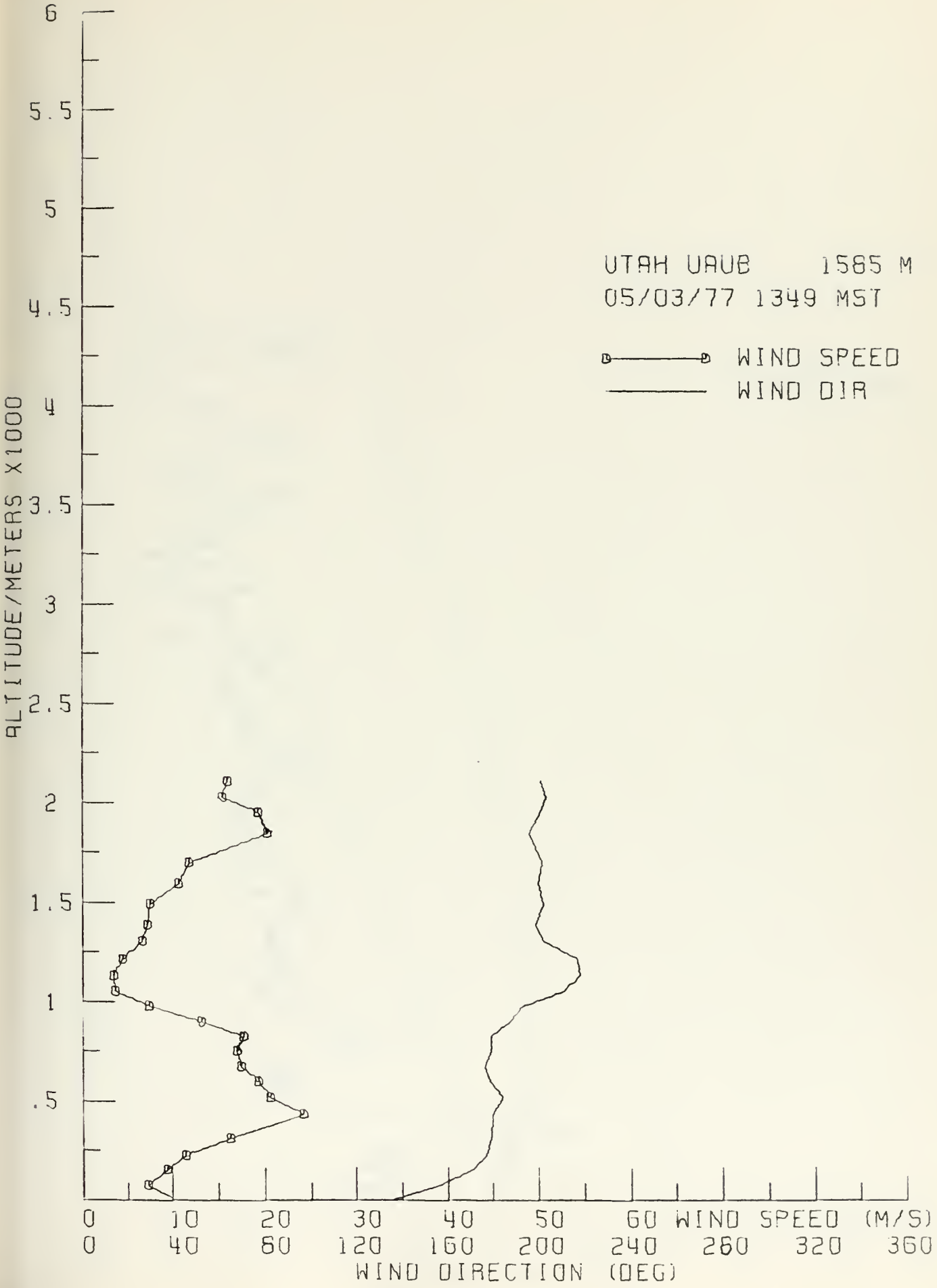

UTAH UAUB 1585 M
05/01/77 1351 MST
D/T 300 M
TEMPERATURE
ALTITUDE/METERS X1000
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
-4 -2 0 2 4 6 8 D/T 300 METERS
-50 -40 -30 -20 -10 0 10 20 30 40 50
TEMPERATURE DEG/C

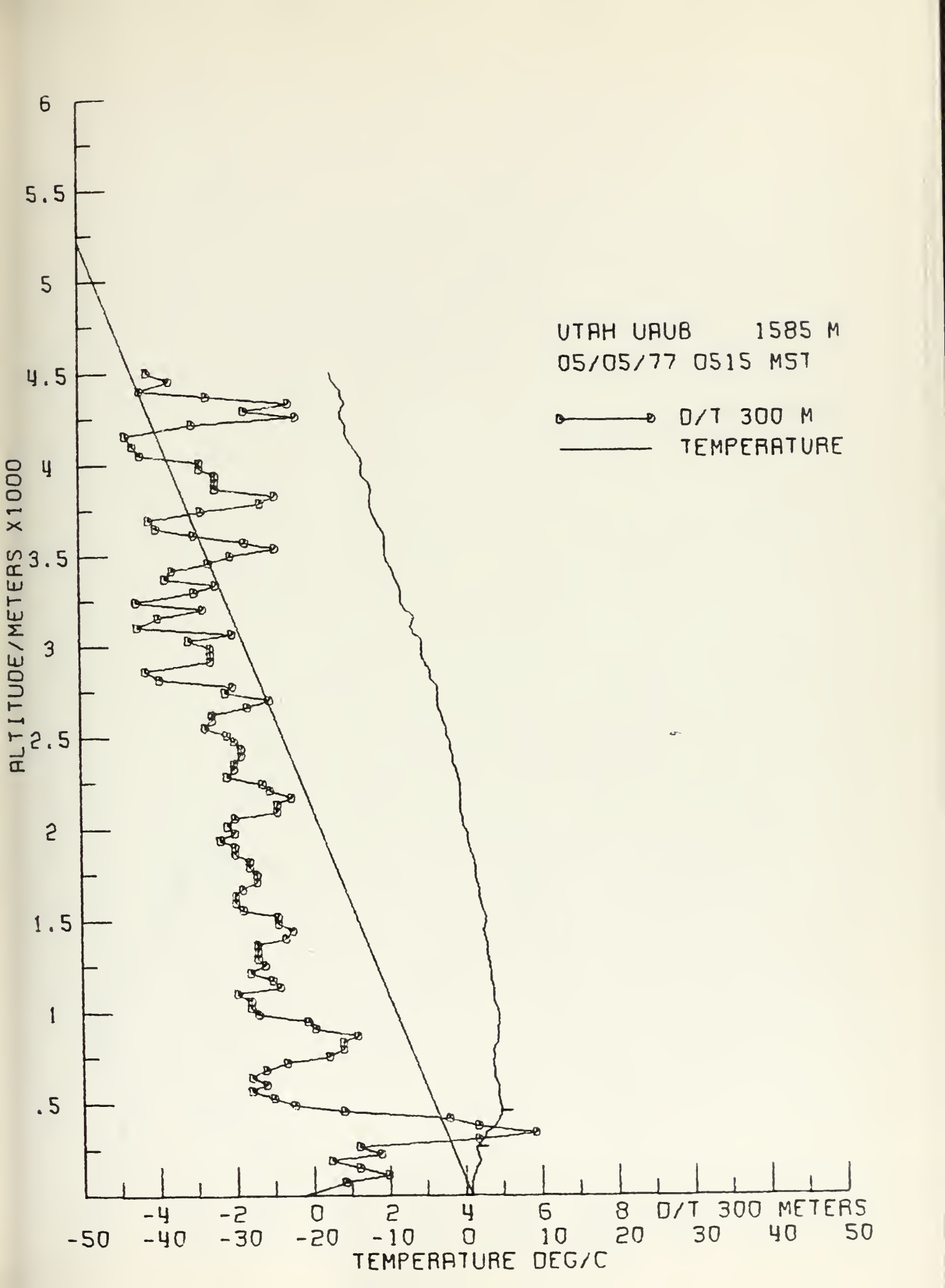

UTAH UAUB 1585 M
05/01/77 1351 MST
WIND SPEED
WIND DIR
ALTITUDE/METERS X1000
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
0 10 20 30 40 50 60 WIND SPEED (M/S)
0 40 80 120 160 200 240 280 320 360
WIND DIRECTION (DEG)

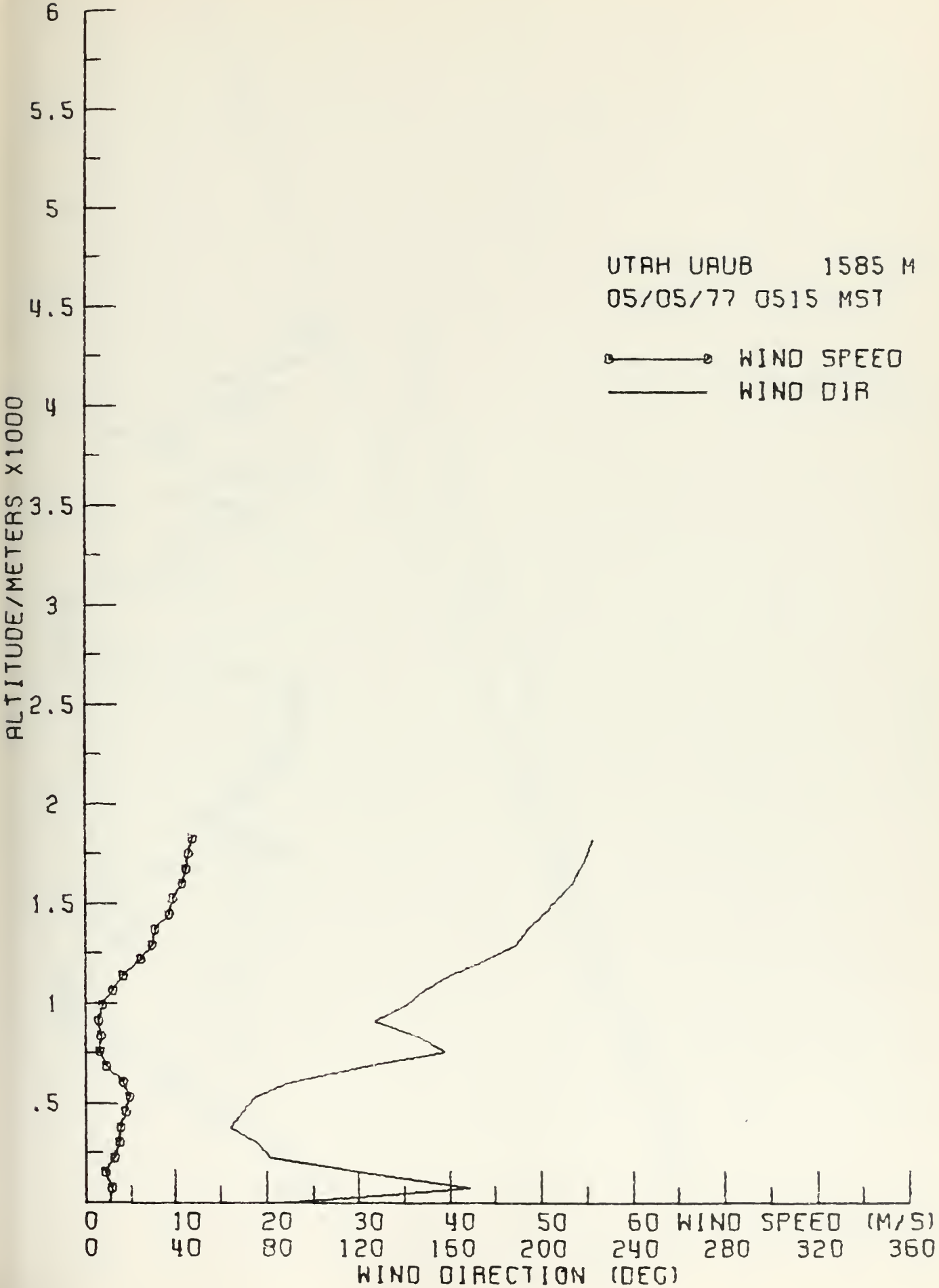

UTAH UAUB 1585 M
05/03/77 0516 MST
D/T 300 M
TEMPERATURE
ALTITUDE/METERS X1000
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
-4
-2
0
2
4
6
8
D/T 300 METERS
-50
-40
-30
-20
-10
0
10
20
30
40
50
TEMPERATURE DEG/C

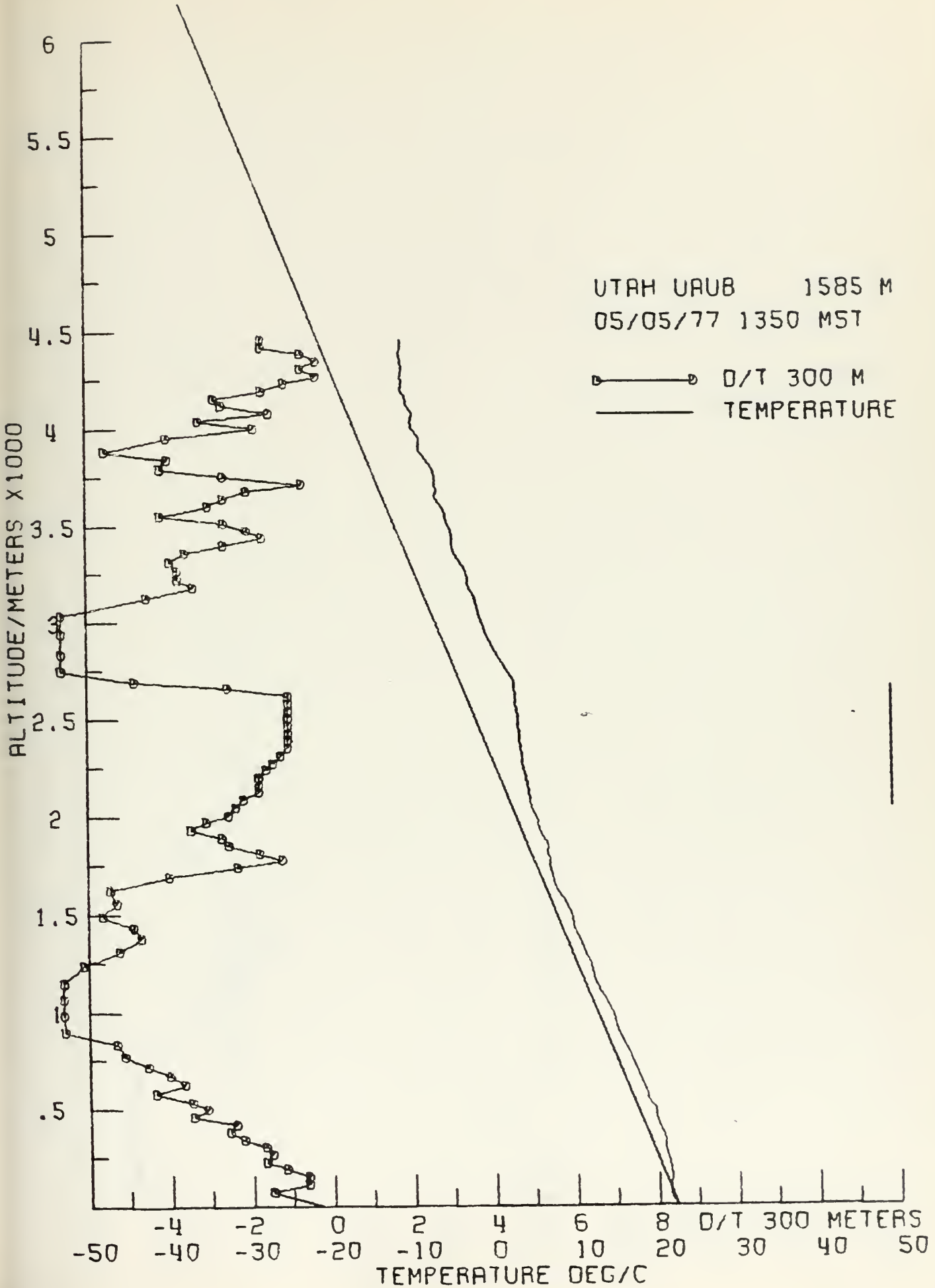

UTAH UAUB 1585 M
05/03/77 0516 MST
WIND SPEED
WIND DIR
ALTITUDE/METERS X1000
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
0 10 20 30 40 50 60 WIND SPEED (M/S)
0 40 80 120 160 200 240 280 320 360
WIND DIRECTION (DEG)

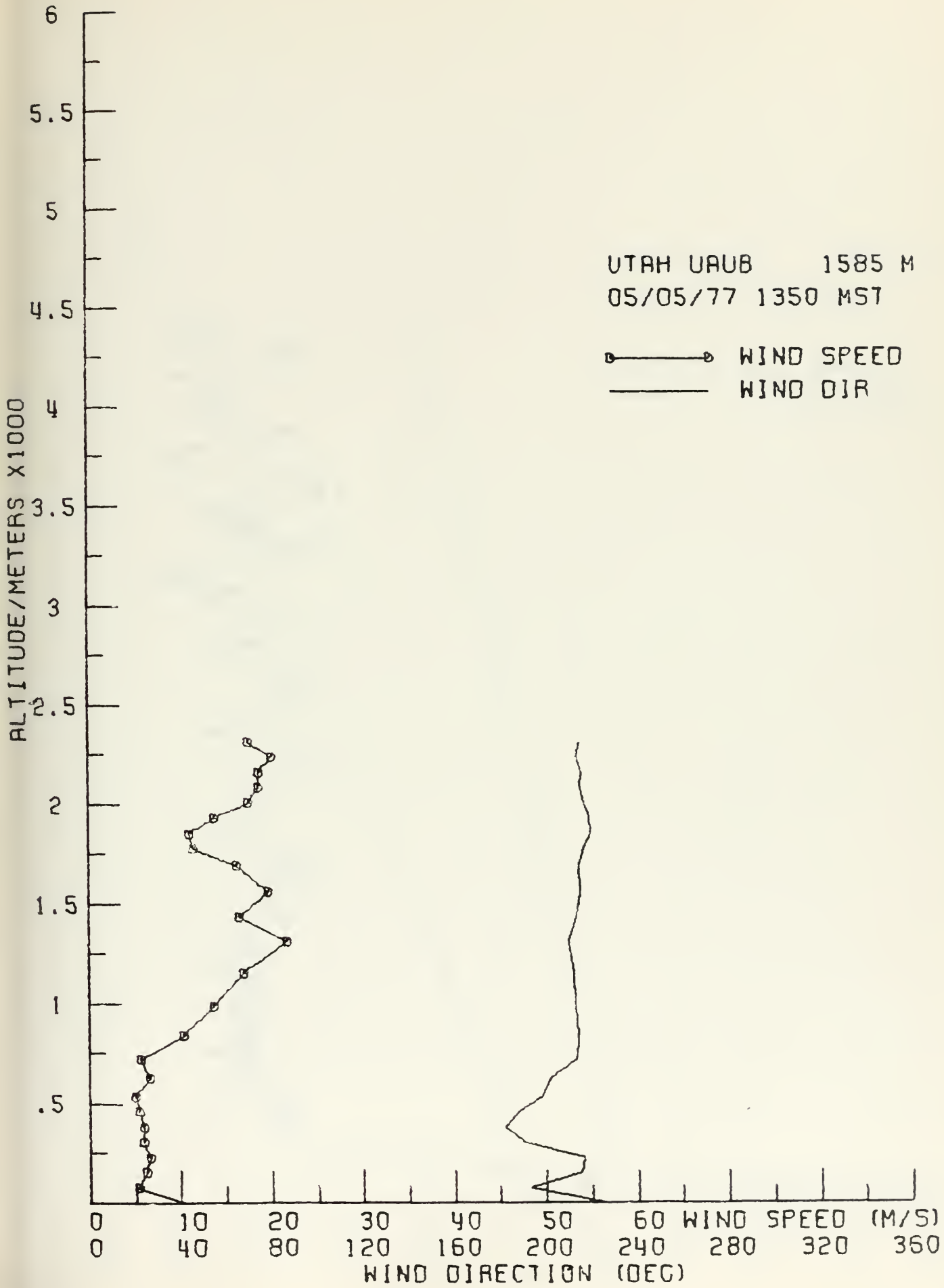

UTAH UAUB 1585 M
05/03/77 1349 MST
D/T 300 M
TEMPERATURE
ALTITUDE/METERS X1000
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
-4
-2
0
2
4
6
8
D/T 300 METERS
-50
-40
-30
-20
-10
0
10
20
30
40
50
TEMPERATURE DEG/C

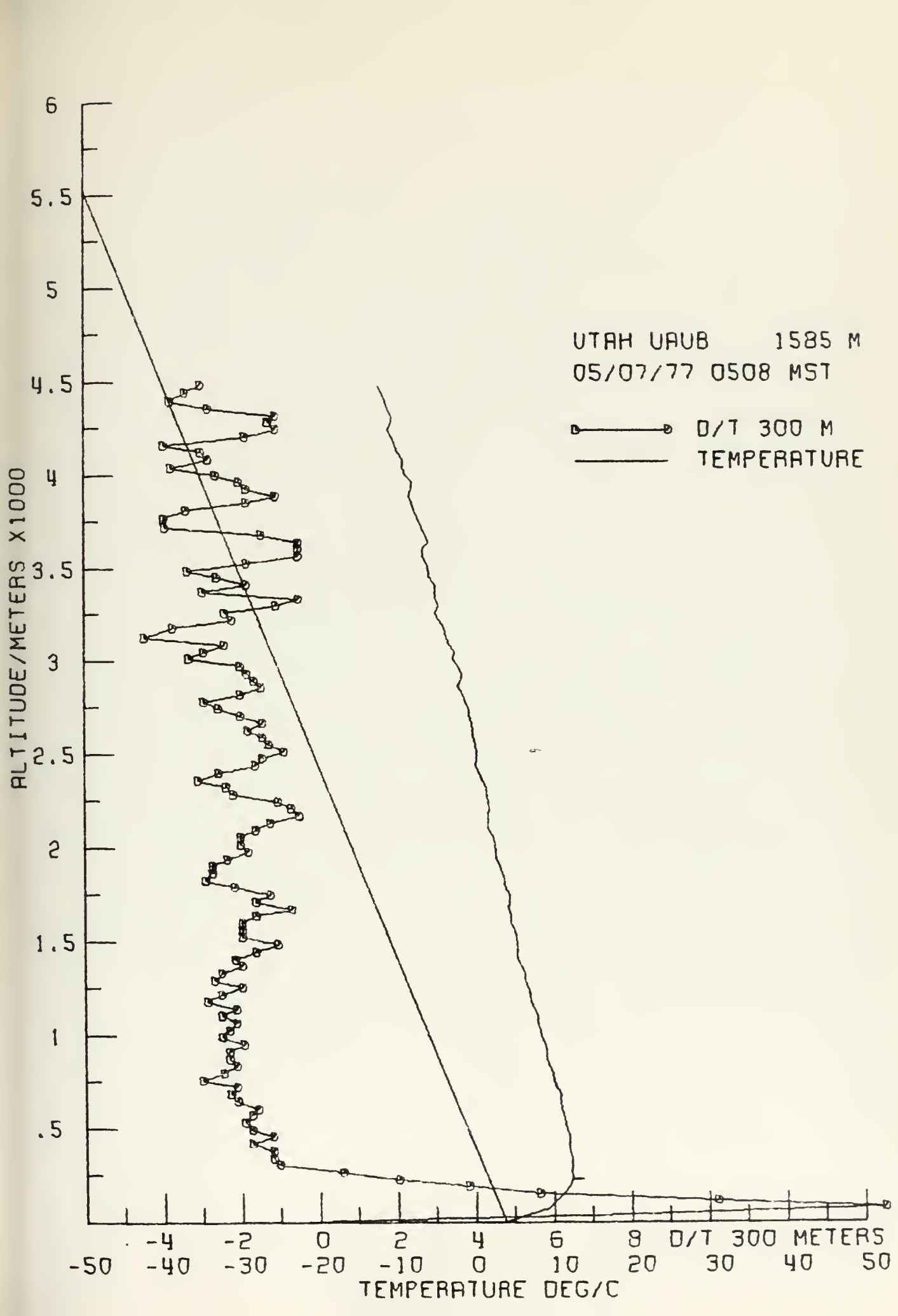

UTAH UAUB 1585 M
05/03/77 1349 MST
WIND SPEED
WIND DIR
ALTITUDE/METERS X1000
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
0 10 20 30 40 50 60 WIND SPEED (M/S)
0 40 80 120 160 200 240 280 320 360
WIND DIRECTION (DEG)

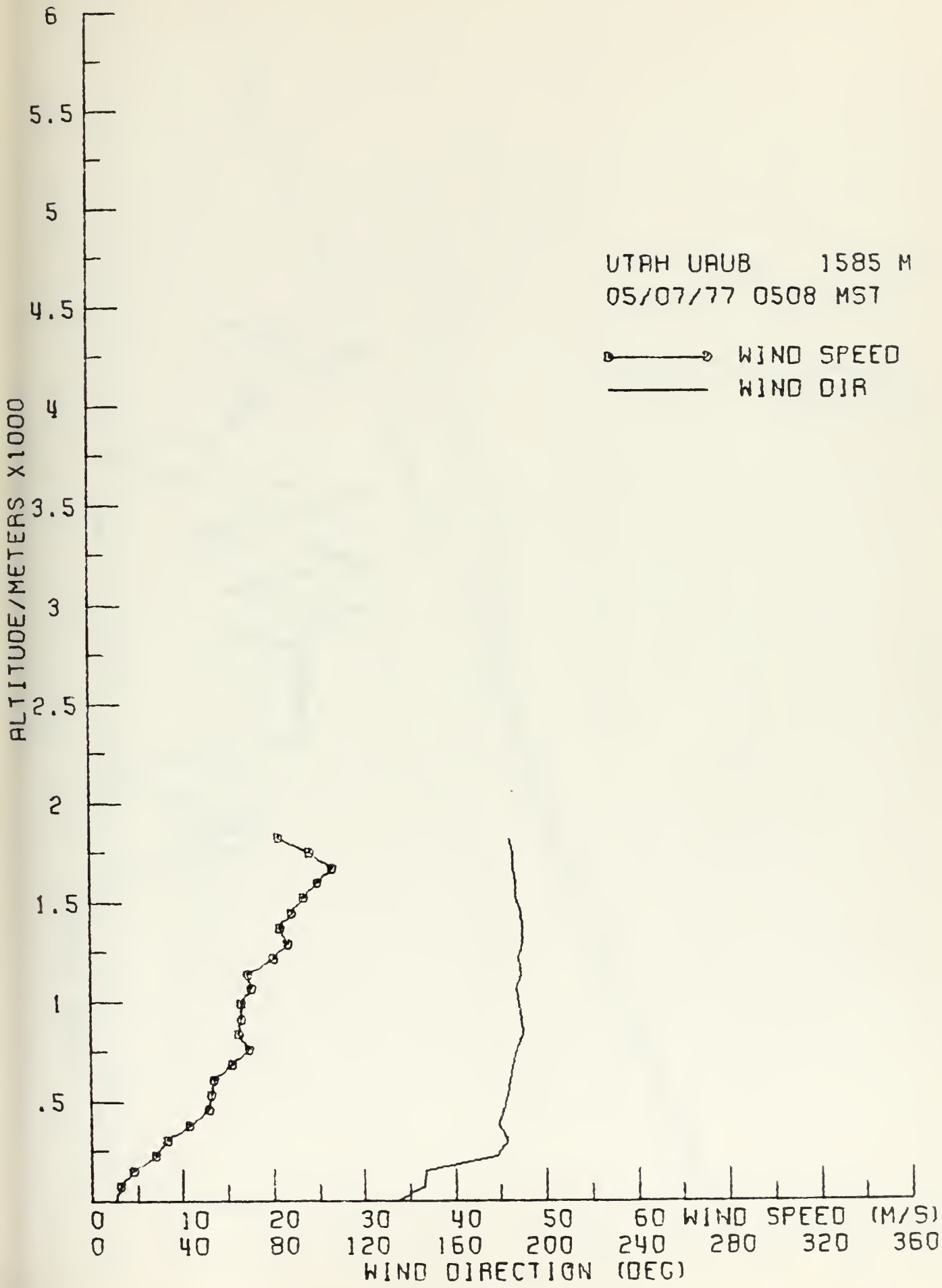

UTAH UAUB 1585 M
05/05/77 0515 MST
D/T 300 M
TEMPERATURE
ALTITUDE/METERS X1000
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
-4 -2 0 2 4 6 8 D/T 300 METERS
-50 -40 -30 -20 -10 0 10 20 30 40 50
TEMPERATURE DEG/C

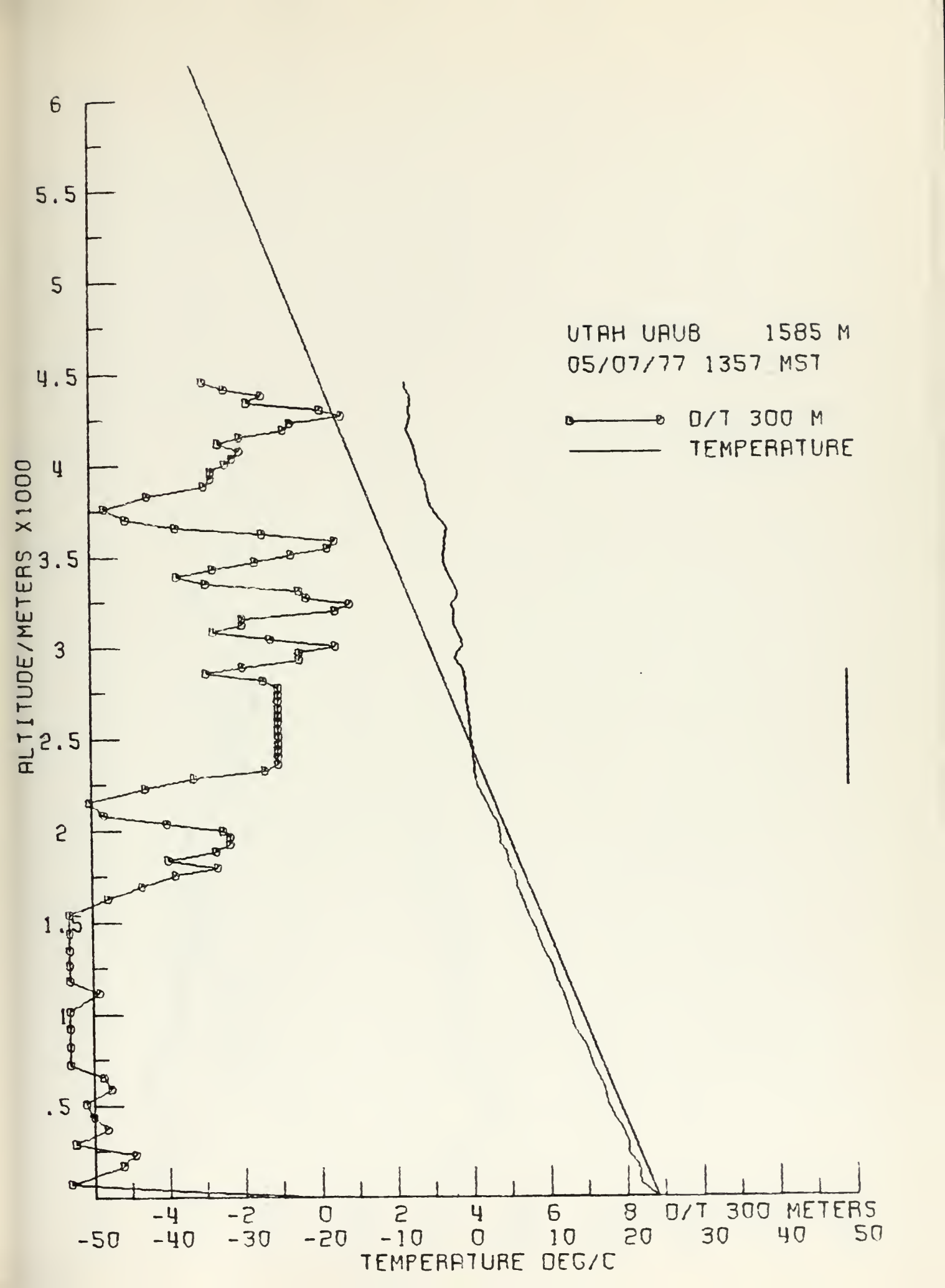

UTAH UAUB 1585 M
05/05/77 0515 MST
WIND SPEED
WIND DIR
ALTITUDE/METERS X1000
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
0 10 20 30 40 50 60 WIND SPEED (M/S)
0 40 80 120 160 200 240 280 320 360
WIND DIRECTION (DEG)

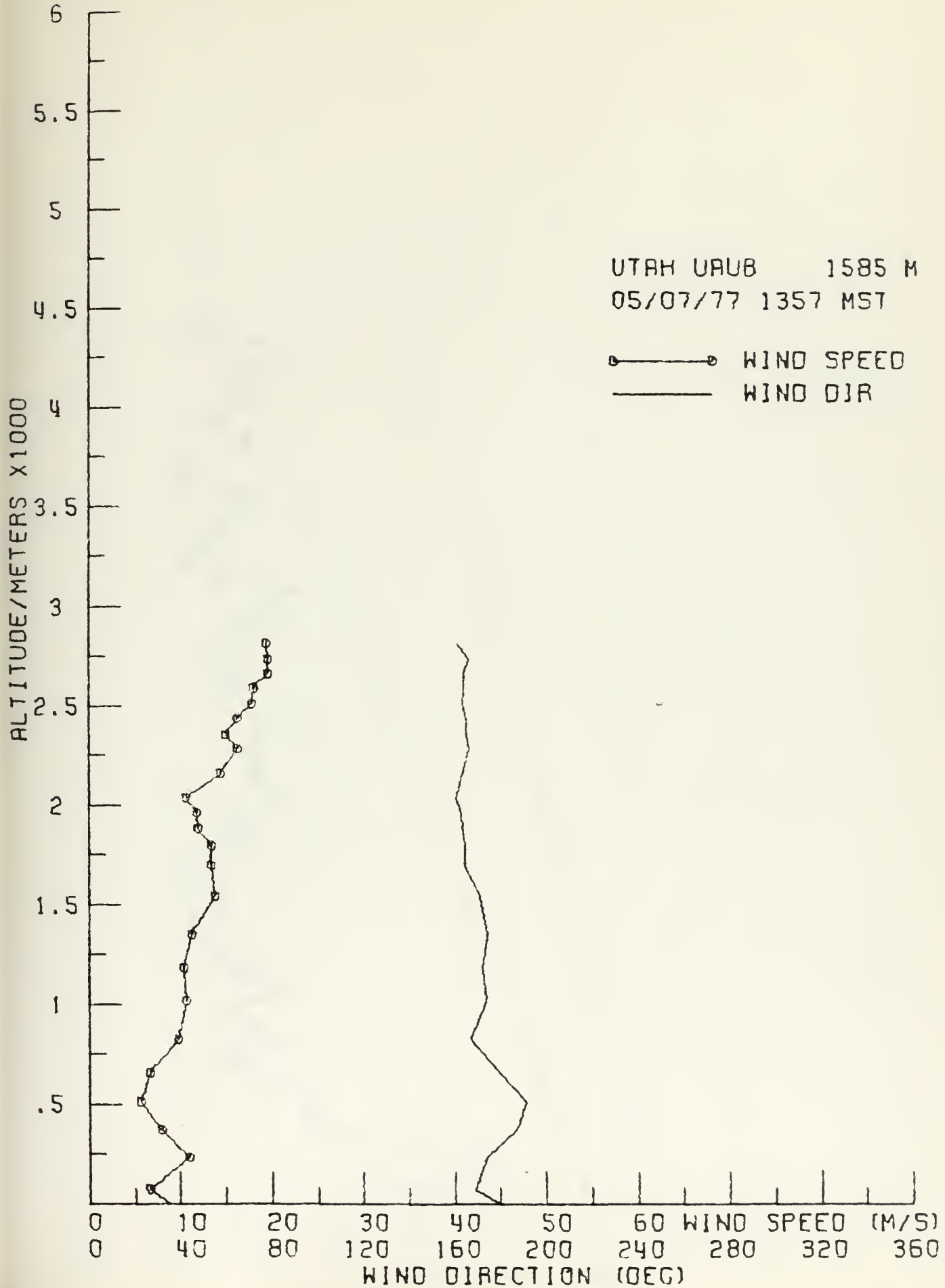

UTAH UAUB 1585 M
05/05/77 1350 MST
D/T 300 M
TEMPERATURE
ALTITUDE/METERS X1000
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
-4
-2
0
2
4
6
8
D/T 300 METERS
-50
-40
-30
-20
-10
0
10
20
30
40
50
TEMPERATURE DEG/C

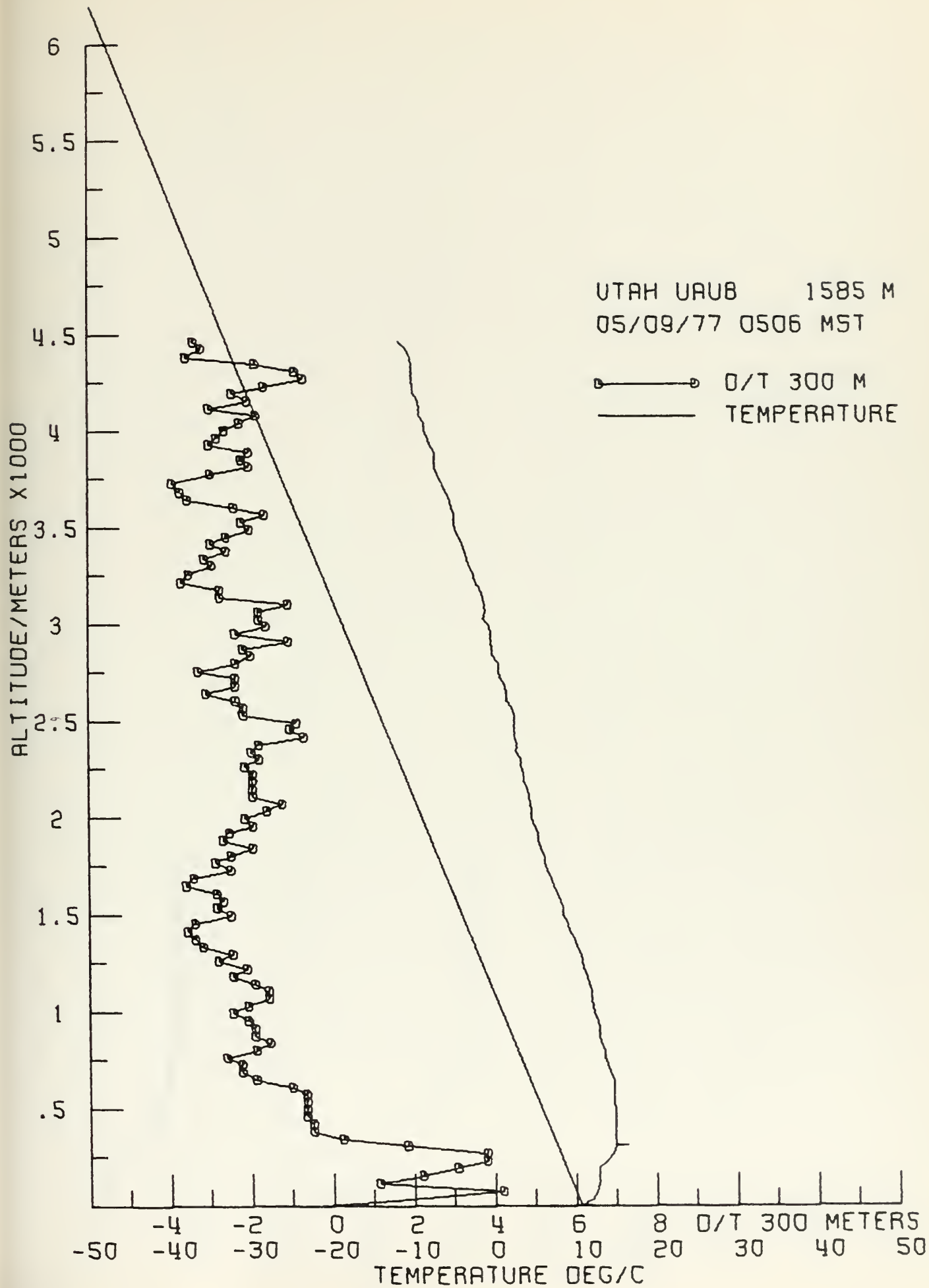

UTAH UAUB 1585 M
05/05/77 1350 MST
WIND SPEED
WIND DIR
ALTITUDE/METERS X1000
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
0 10 20 30 40 50 60 WIND SPEED (M/S)
0 40 80 120 160 200 240 280 320 360
WIND DIRECTION (DEG)

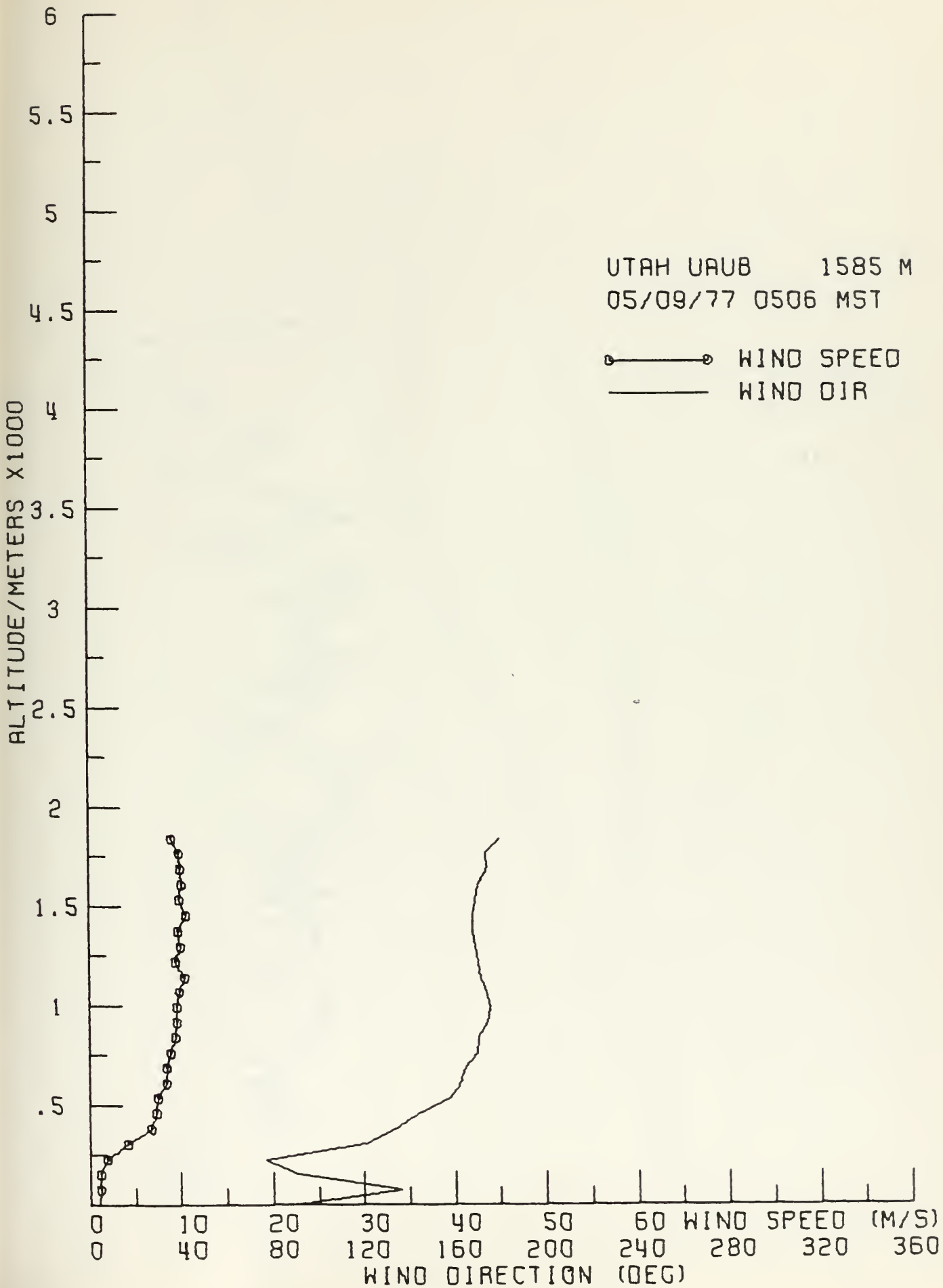

UTAH UAUB 1585 M
05/07/77 0508 MST
D/T 300 M
TEMPERATURE
ALTITUDE/METERS X1000
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
-4 -2 0 2 4 6 8 D/T 300 METERS
-50 -40 -30 -20 -10 0 10 20 30 40 50
TEMPERATURE DEG/C

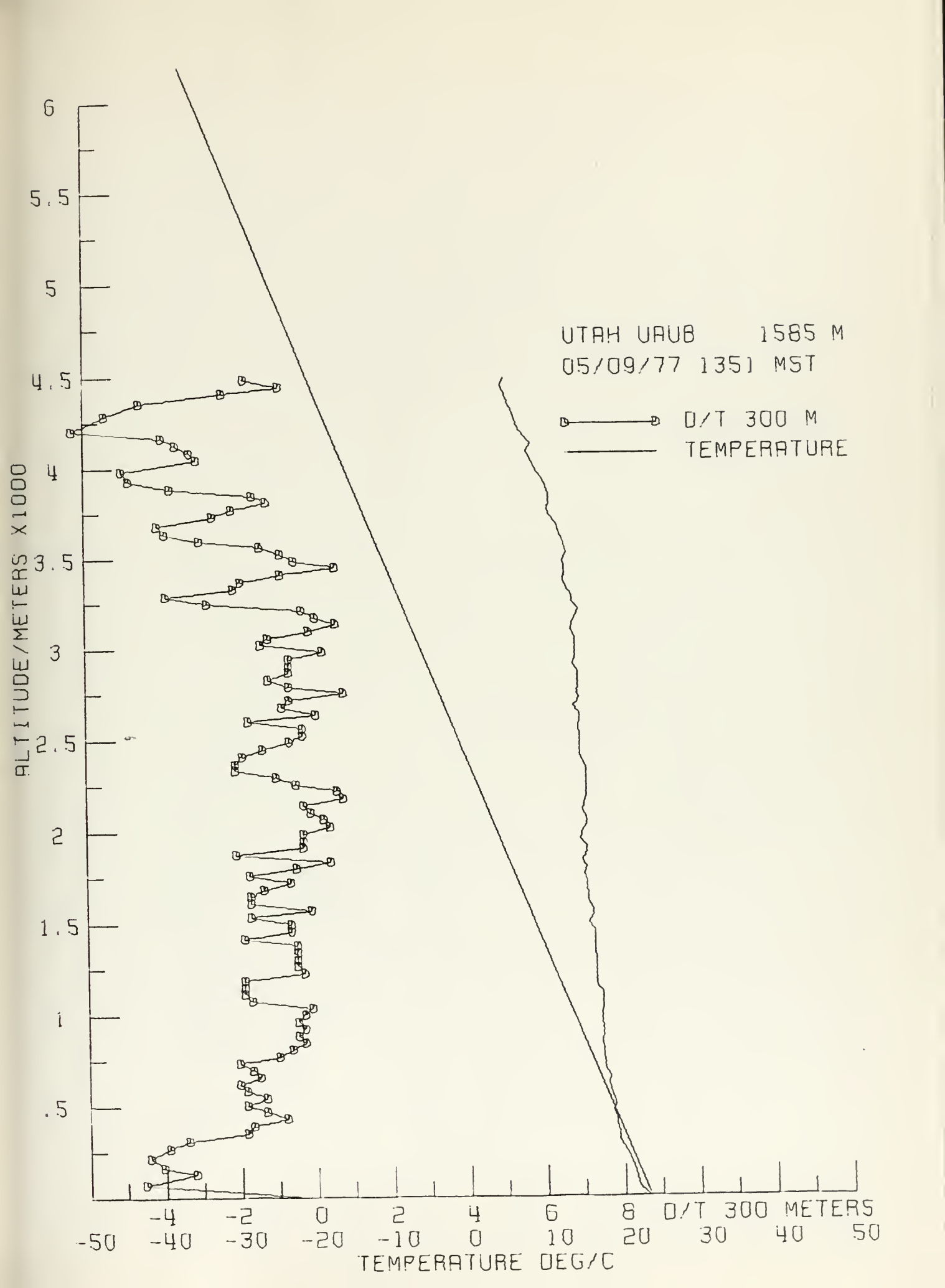

UTAH UAUB 1585 M
05/07/77 0508 MST
WIND SPEED
WIND DIR
ALTITUDE/METERS X1000
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
0 10 20 30 40 50 60 WIND SPEED (M/S)
0 40 80 120 160 200 240 280 320 360
WIND DIRECTION (DEG)


UTAH UAUB 1585 M
05/07/77 1357 MST
O/T 300 M
TEMPERATURE
ALTITUDE/METERS X1000
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
-4 -2 0 2 4 6 8 O/T 300 METERS
-50 -40 -30 -20 -10 0 10 20 30 40 50
TEMPERATURE DEG/C


UTAH UAUB 1585 M
05/07/77 1357 MST
WIND SPEED
WIND DIR
ALTITUDE/METERS X1000
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
0 10 20 30 40 50 60 WIND SPEED (M/S)
0 40 80 120 160 200 240 280 320 360
WIND DIRECTION (DEG)


UTAH UAUB 1585 M
05/09/77 0506 MST
O/T 300 M
TEMPERATURE
ALTITUDE/METERS X1000
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
-4 -2 0 2 4 6 8 O/T 300 METERS
-50 -40 -30 -20 -10 0 10 20 30 40 50
TEMPERATURE DEG/C


UTAH UAUB 1585 M
05/09/77 0506 MST
WIND SPEED
WIND DIR
ALTITUDE/METERS X1000
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
0 10 20 30 40 50 60 WIND SPEED (M/S)
0 40 80 120 160 200 240 280 320 360
WIND DIRECTION (DEG)


UTAH UAUB 1585 M
05/09/77 1351 MST
D/T 300 M
TEMPERATURE
ALTITUDE/METERS X1000
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5.5
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4.5
4
3.5
3
2.5
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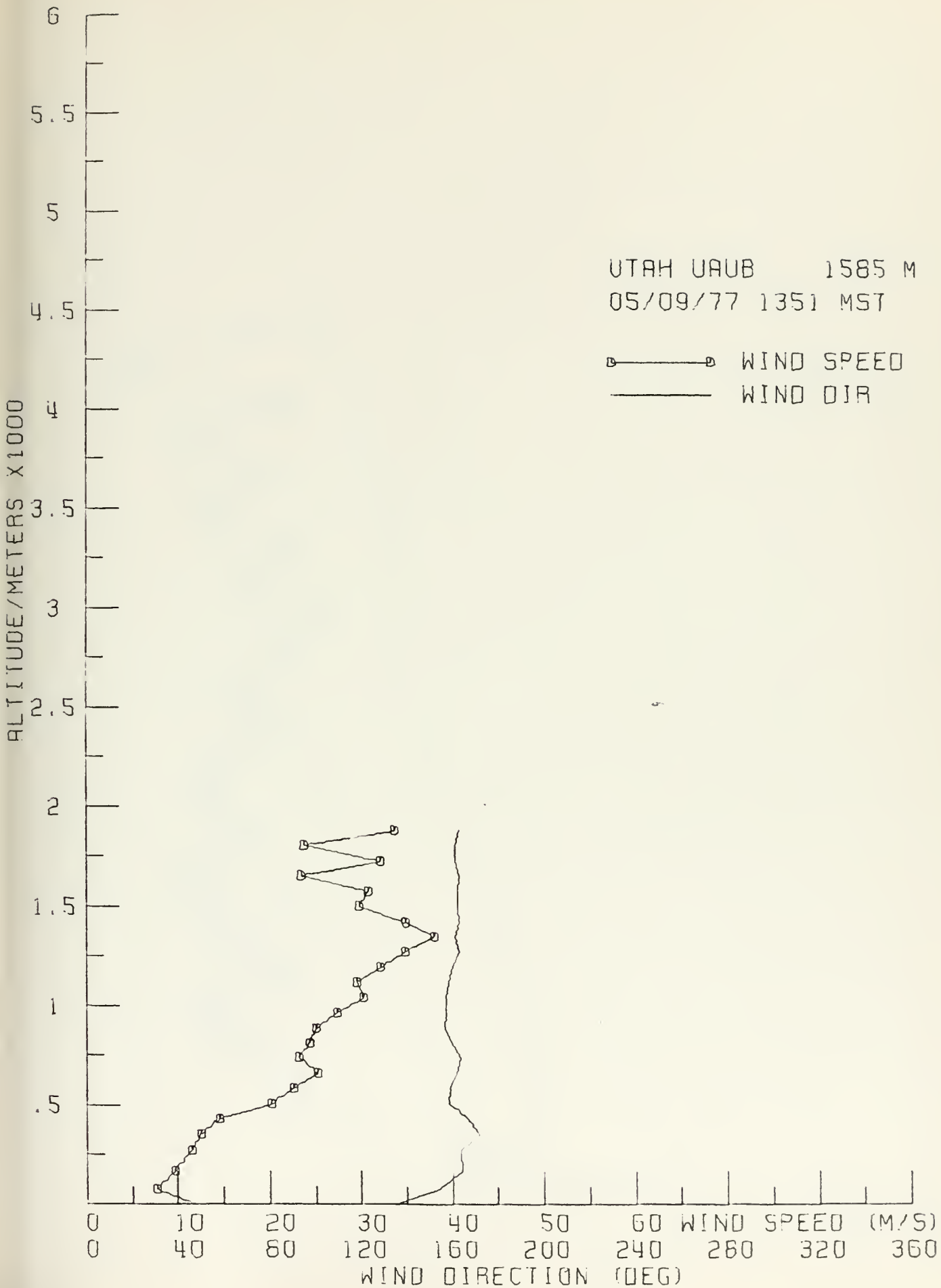
TEMPERATURE DEG/C


UTAH UAUB 1585 M
05/09/77 1351 MST
WIND SPEED
WIND DIR
ALTITUDE/METERS X1000
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4.5
4
3.5
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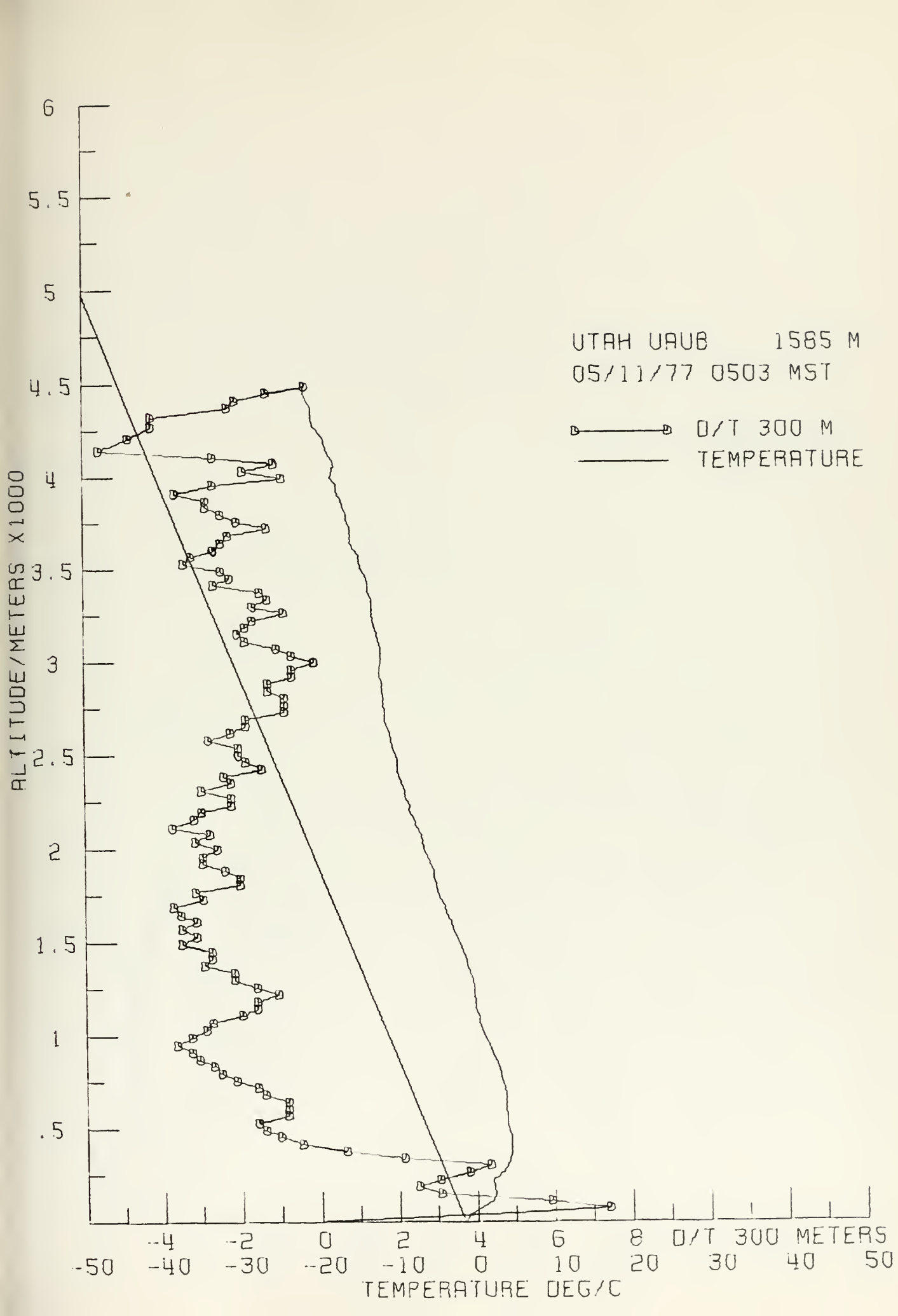
0 10 20 30 40 50 60 WIND SPEED (M/S)
0 40 80 120 160 200 240 280 320 360
WIND DIRECTION (DEG)


UTAH UAUB 1585 M
05/11/77 0503 MST
D/T 300 M
TEMPERATURE
ALTITUDE/METERS X1000
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-2
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2
4
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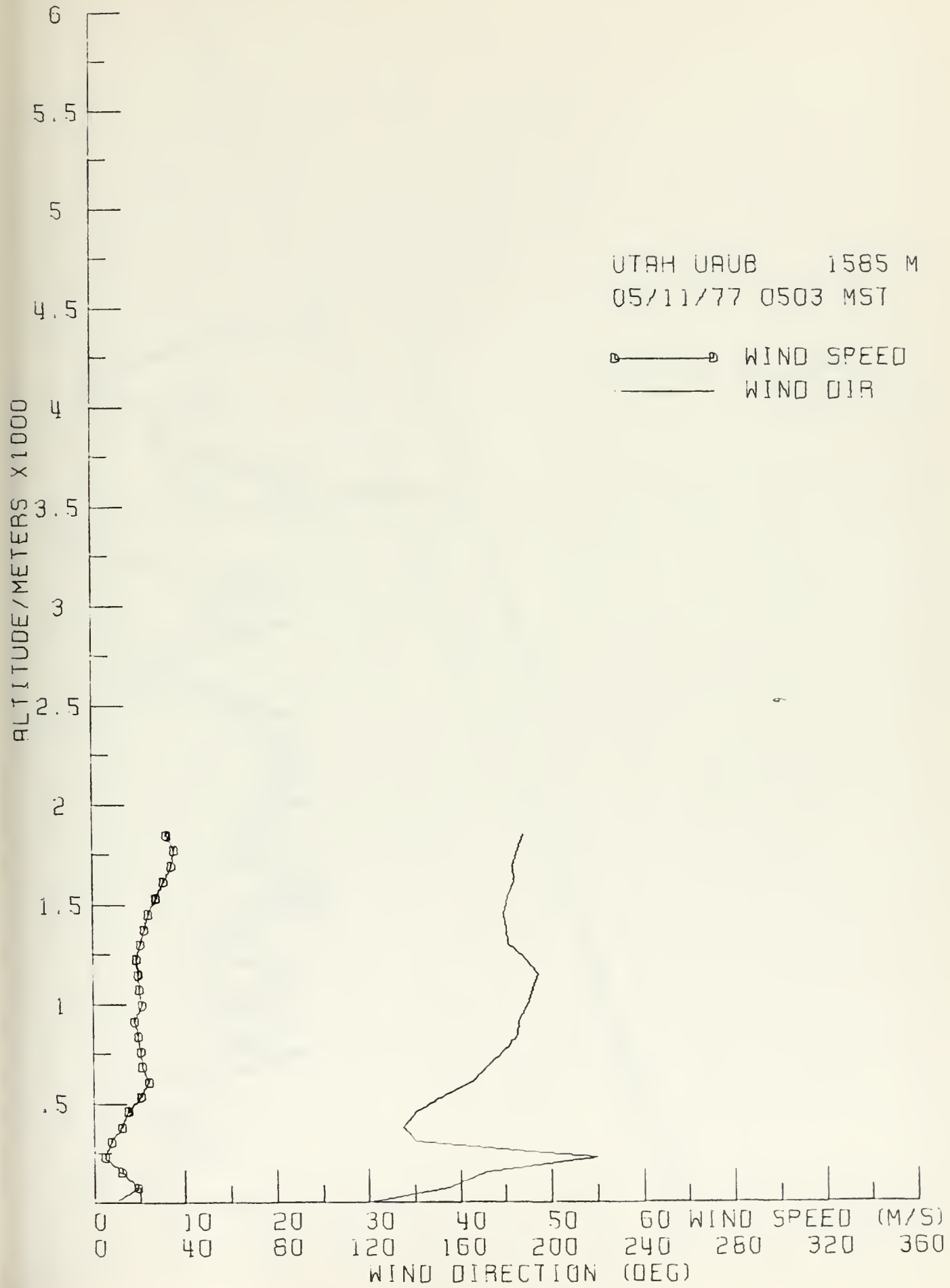
TEMPERATURE DEG/C


UTAH UAUB 1585 M
05/11/77 0503 MST
WIND SPEED
WIND DIR
ALTITUDE/METERS X1000
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3.5
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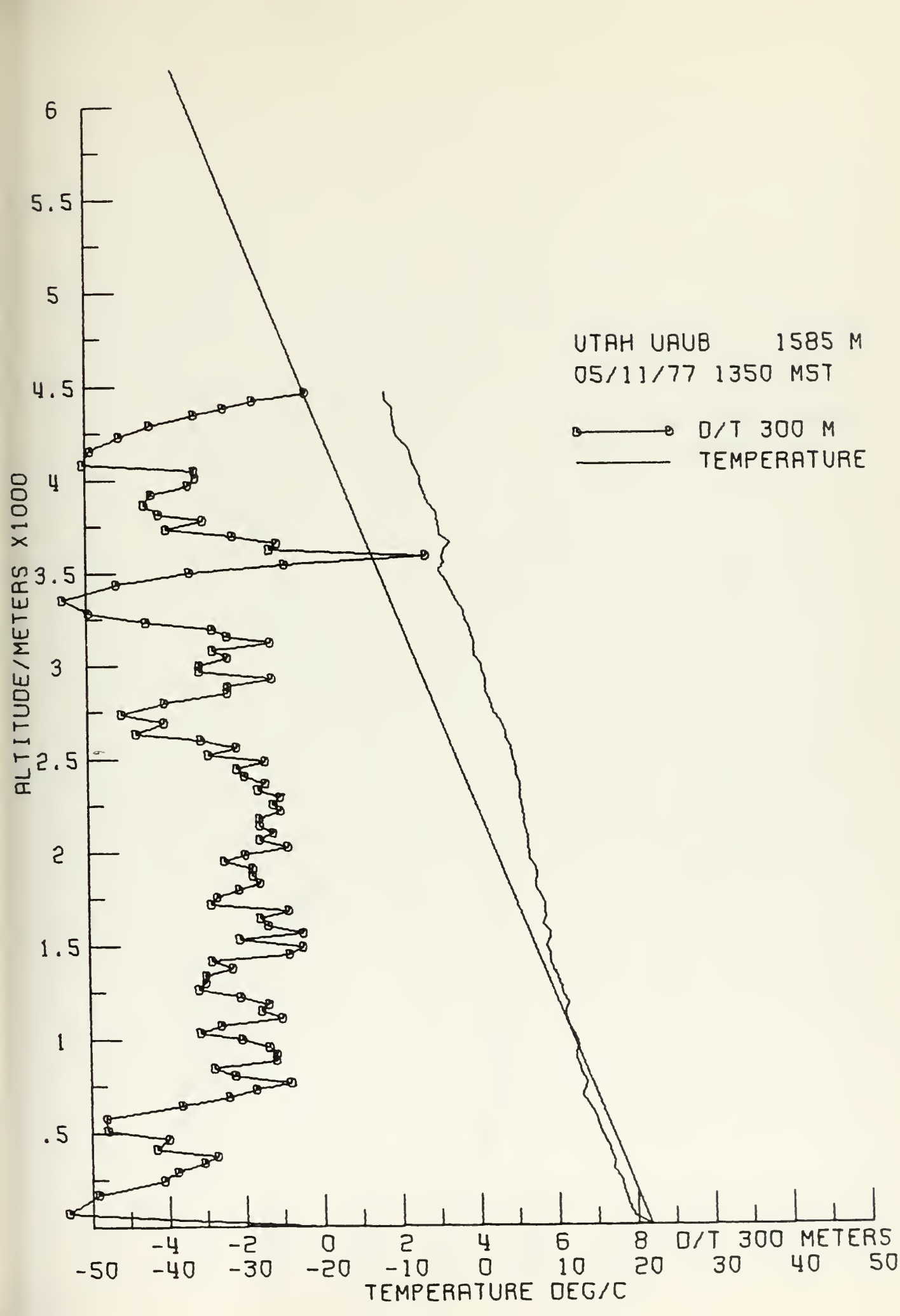
0 10 20 30 40 50 60 WIND SPEED (M/S)
0 40 80 120 160 200 240 280 320 360
WIND DIRECTION (DEG)


UTAH UAUB 1585 M
05/11/77 1350 MST
D/T 300 M
TEMPERATURE
ALTITUDE/METERS X1000
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2
4
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D/T 300 METERS
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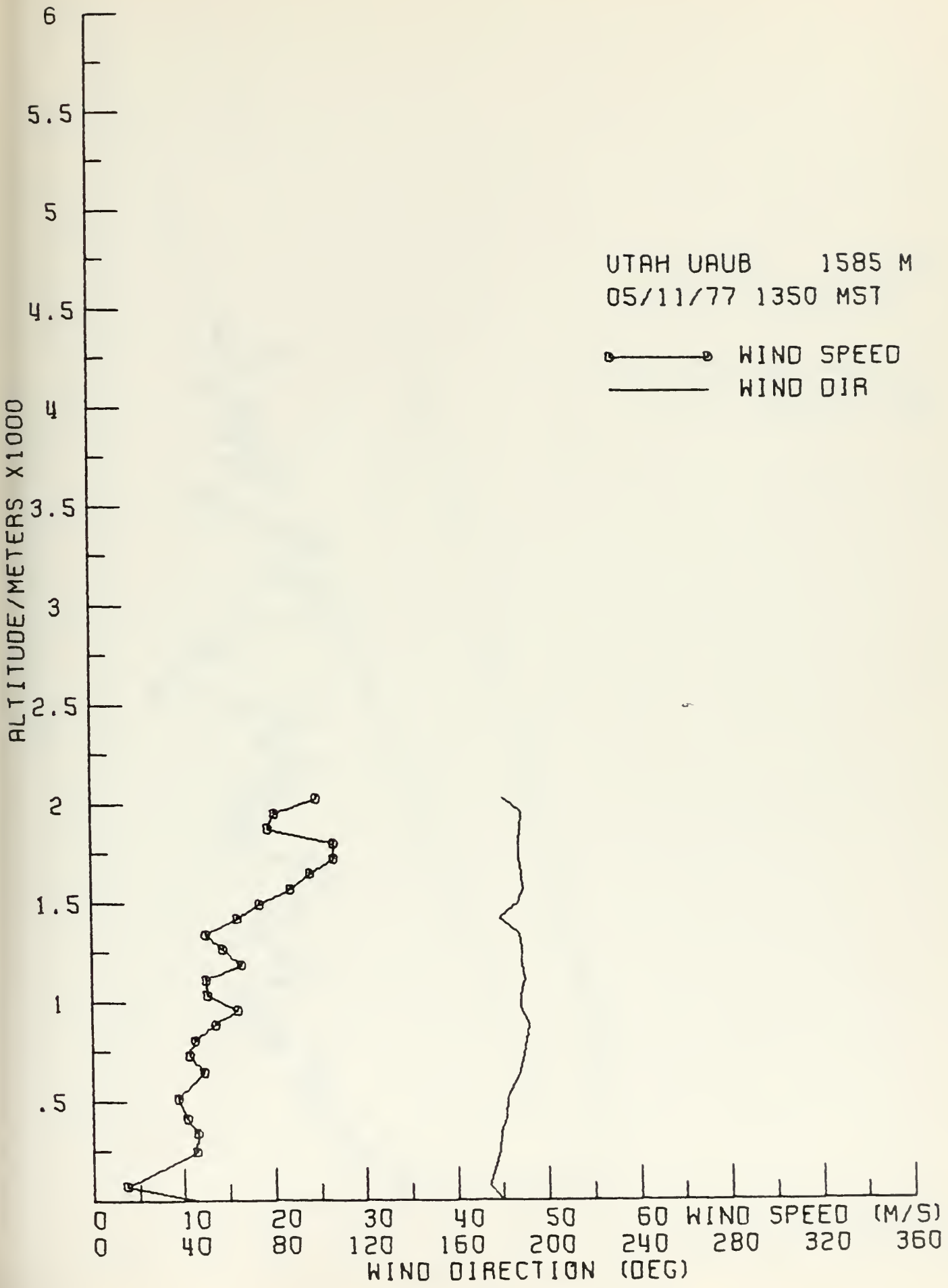
TEMPERATURE DEG/C


UTAH UAUB 1585 M
05/11/77 1350 MST
WIND SPEED
WIND DIR
ALTITUDE/METERS X1000
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4.5
4
3.5
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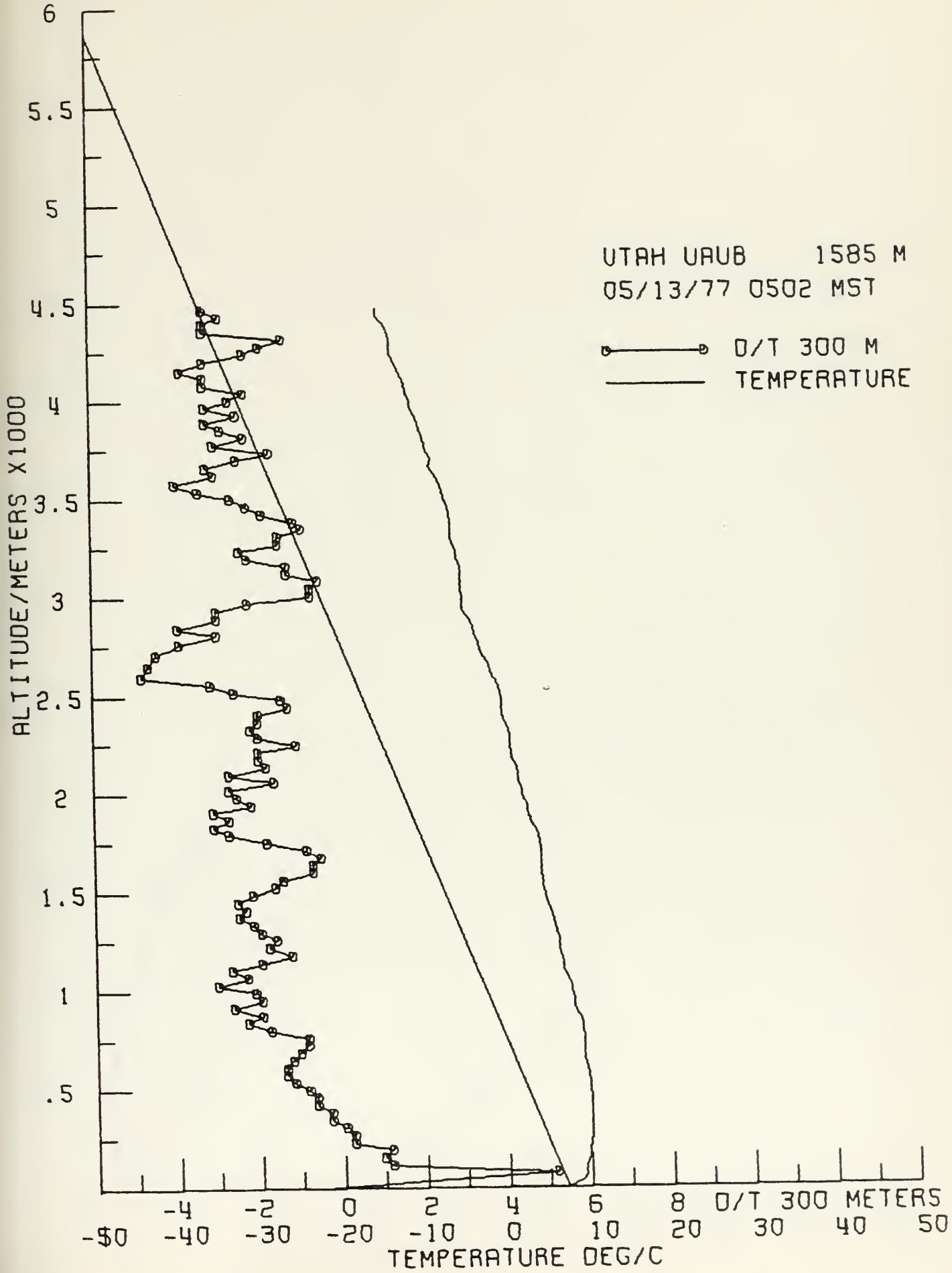
0 10 20 30 40 50 60 WIND SPEED (M/S)
0 40 80 120 160 200 240 280 320 360
WIND DIRECTION (DEG)


UTAH UAUB 1585 M
05/13/77 0502 MST
D/T 300 M
TEMPERATURE
ALTITUDE/METERS X1000
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4.5
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3.5
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2.5
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1.5
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.5
-4
-2
0
2
4
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D/T 300 METERS
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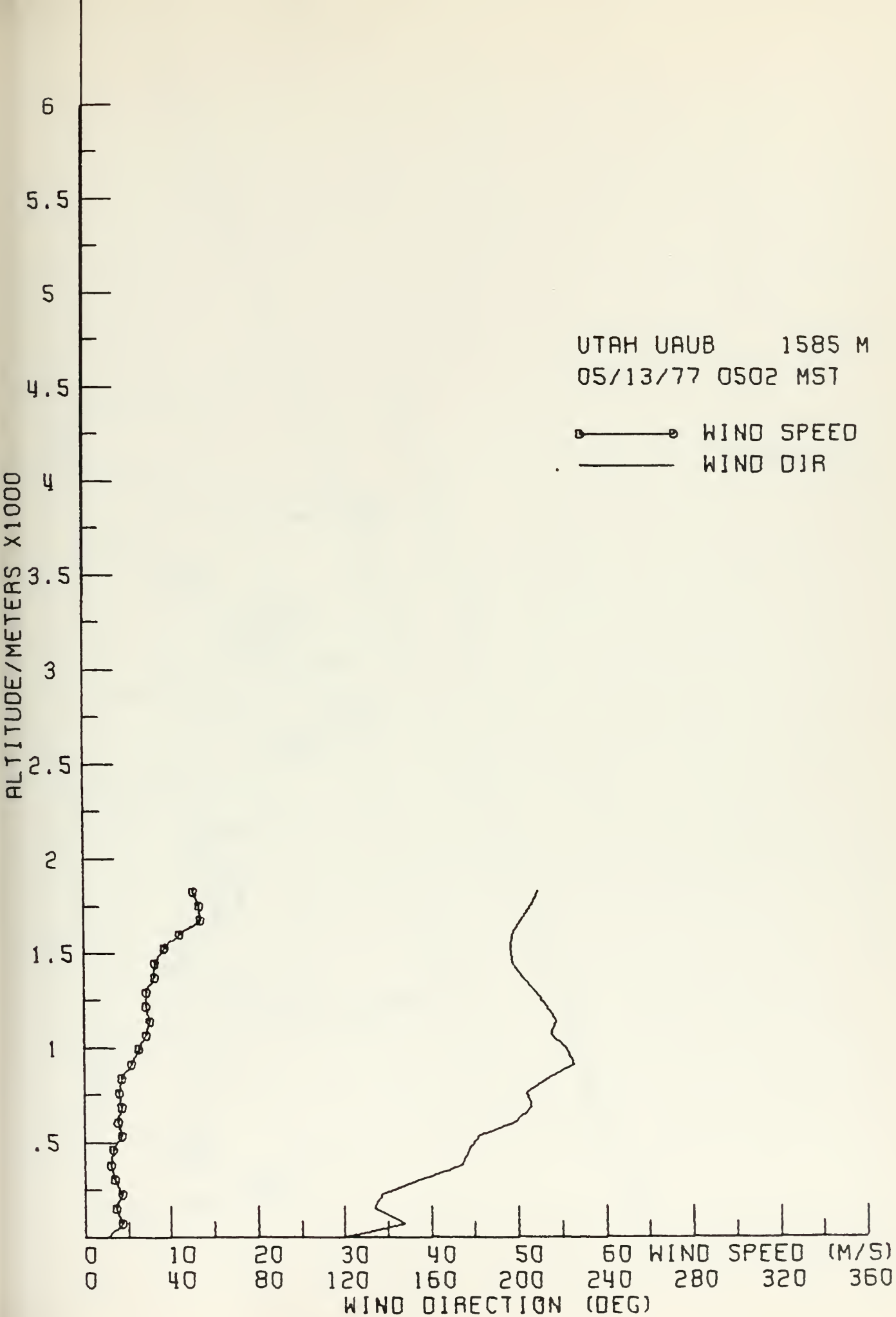
-20
-10
0
10
20
30
40
50
TEMPERATURE DEG/C


UTAH UAUB 1585 M
05/13/77 0502 MST
WIND SPEED
WIND DIR
ALTITUDE/METERS X1000
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4.5
4
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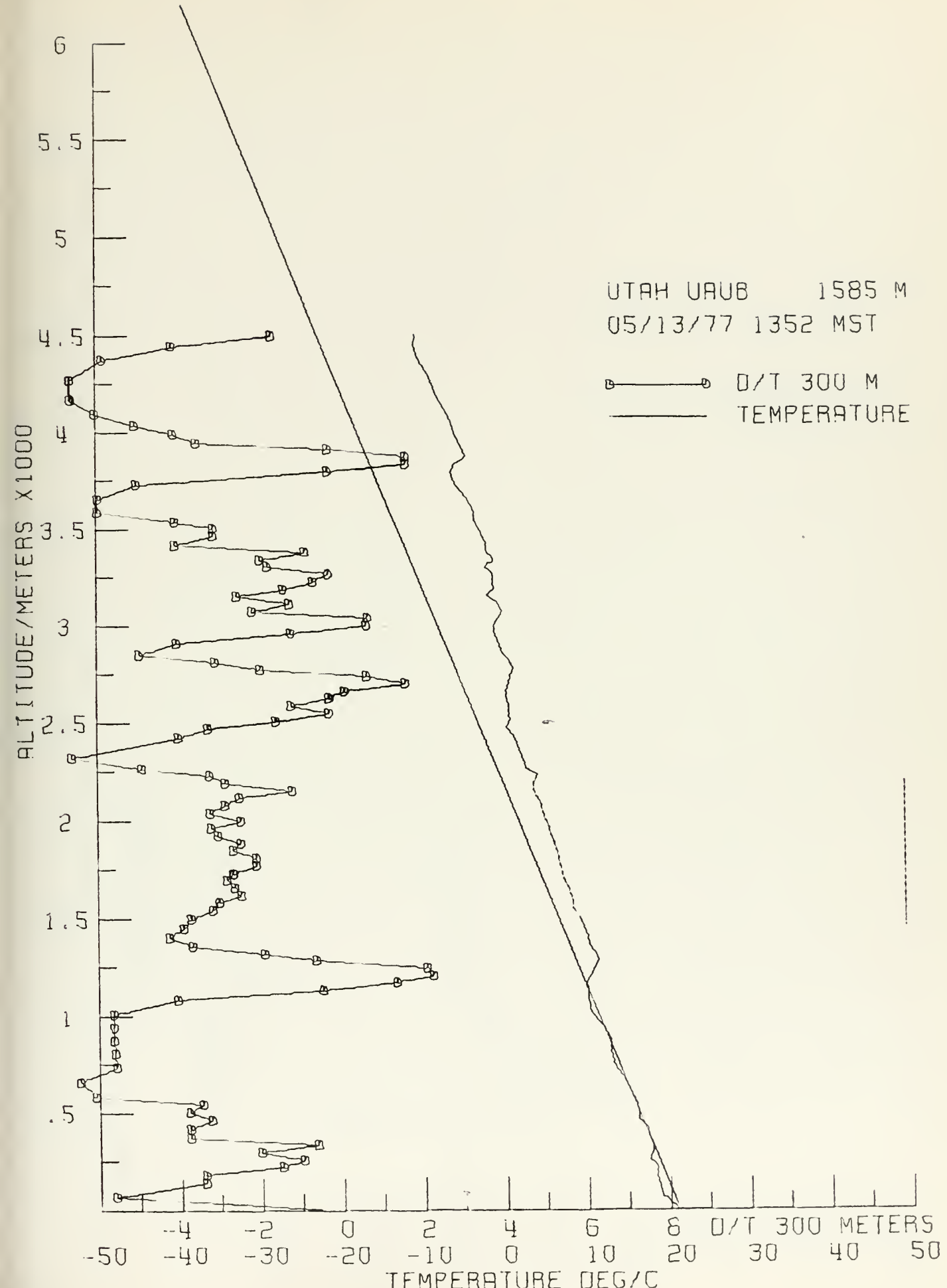
0 10 20 30 40 50 60 WIND SPEED (M/S)
0 40 80 120 160 200 240 280 320 360
WIND DIRECTION (DEG)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05/13/77 1352 MST
D/T 300 M
TEMPERATURE
ALTITUDE/METERS X1000
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4.5
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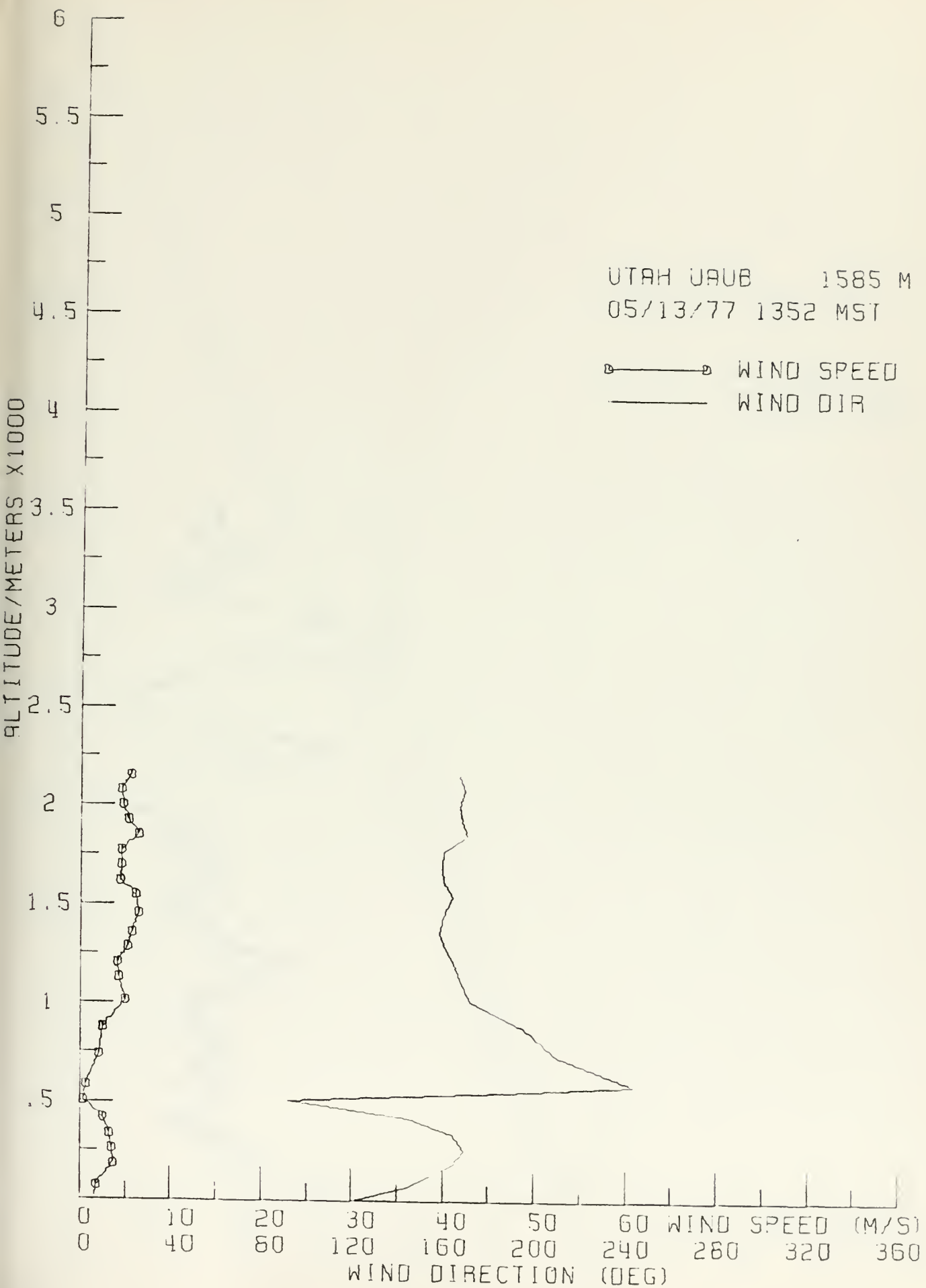
1.5
1
.5
-4
-2
0
2
4
6
8
D/T 300 METERS
-50
-40
-30
-20
-10
0
10
20
30
40
50
TEMPERATURE DEG/C


UTAH UAUB 1585 M
05/13/77 1352 MST
WIND SPEED
WIND DIR
ALTITUDE/METERS X1000
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5.5
5
4.5
4
3.5
3
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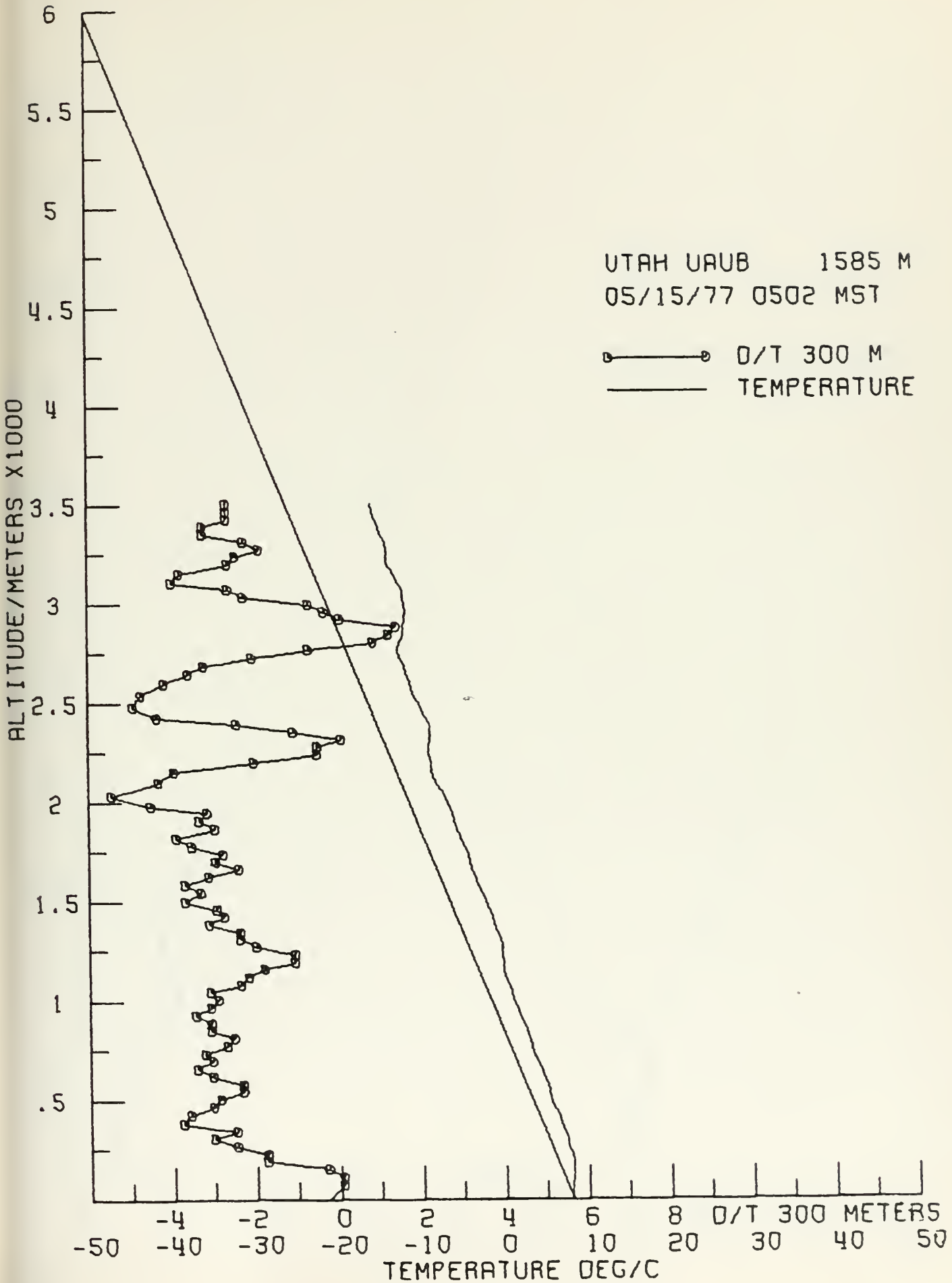
1
.5
0 10 20 30 40 50 60 WIND SPEED (M/S)
0 40 80 120 160 200 240 280 320 360
WIND DIRECTION (DEG)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05/15/77 0502 MST
D/T 300 M
TEMPERATURE
ALTITUDE/METERS X1000
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4.5
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3.5
3
2.5
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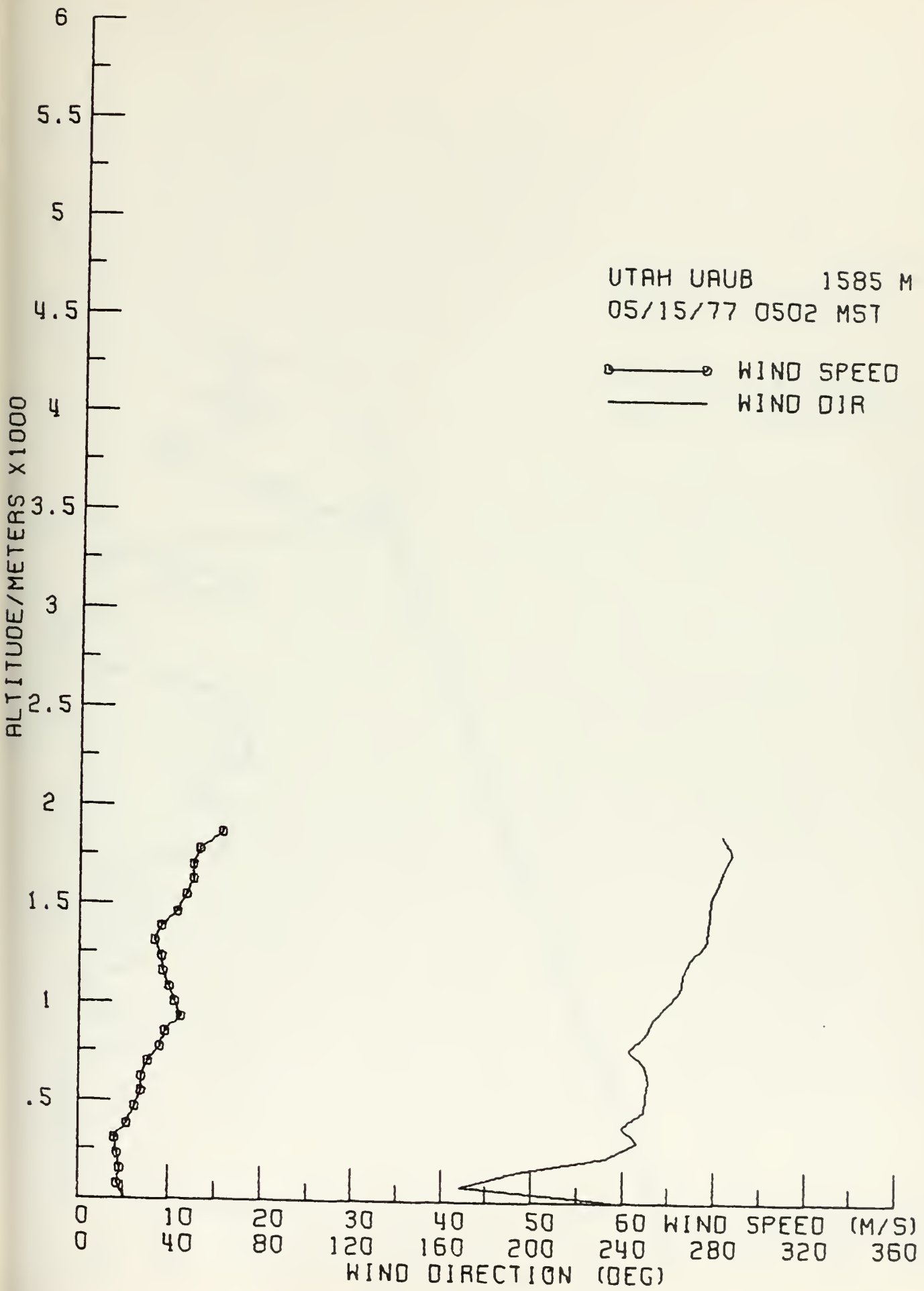
-4 -2 0 2 4 6 8 D/T 300 METERS
-50 -40 -30 -20 -10 0 10 20 30 40 50
TEMPERATURE DEG/C


UTAH UAUB 1585 M
05/15/77 0502 MST
WIND SPEED
WIND DIR
ALTITUDE/METERS X1000
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5.5
5
4.5
4
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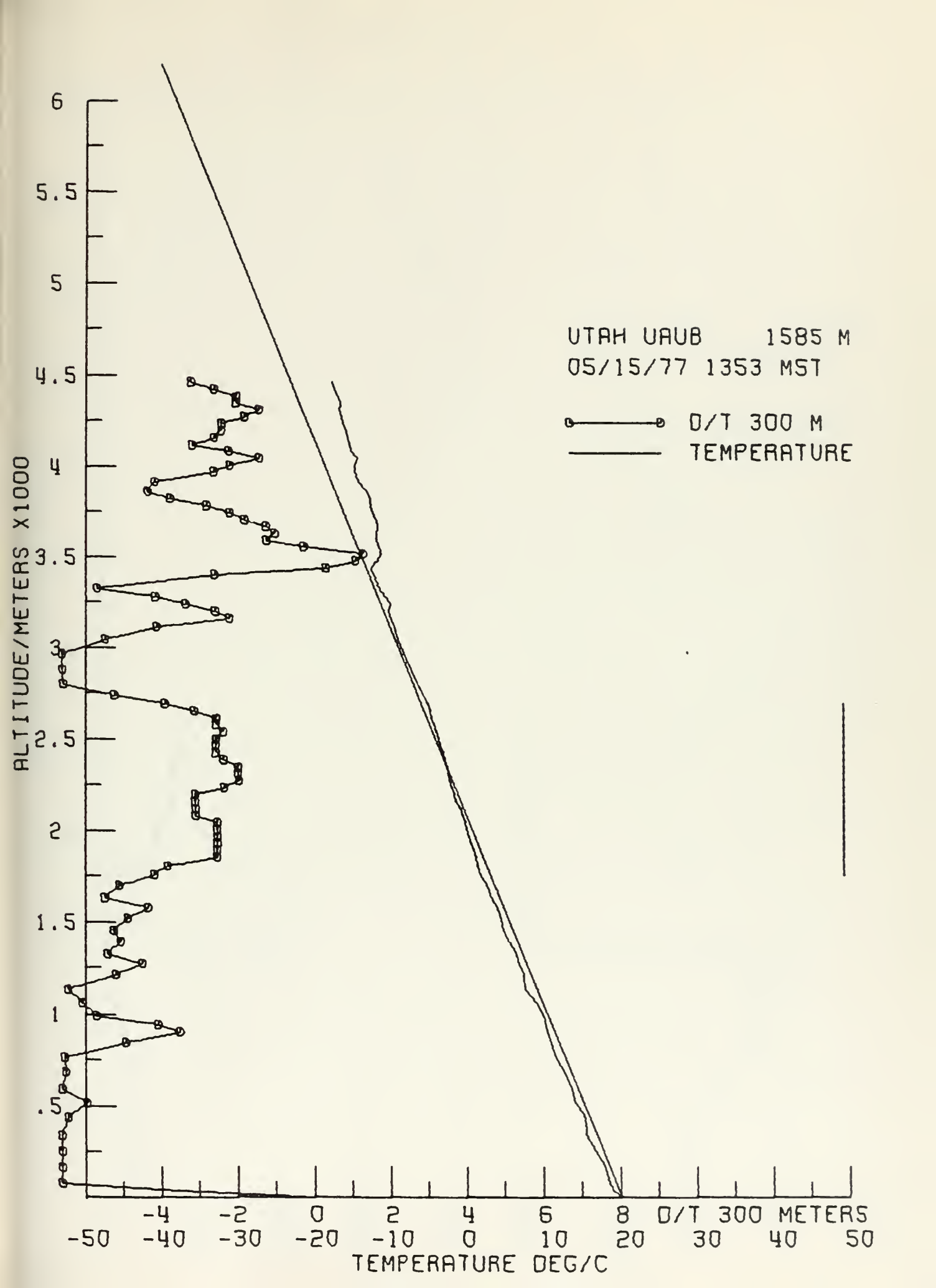
0 10 20 30 40 50 60 WIND SPEED (M/S)
0 40 80 120 160 200 240 280 320 360
WIND DIRECTION (DEG)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05/15/77 1353 MST
D/T 300 M
TEMPERATURE
ALTITUDE/METERS X1000
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3.5
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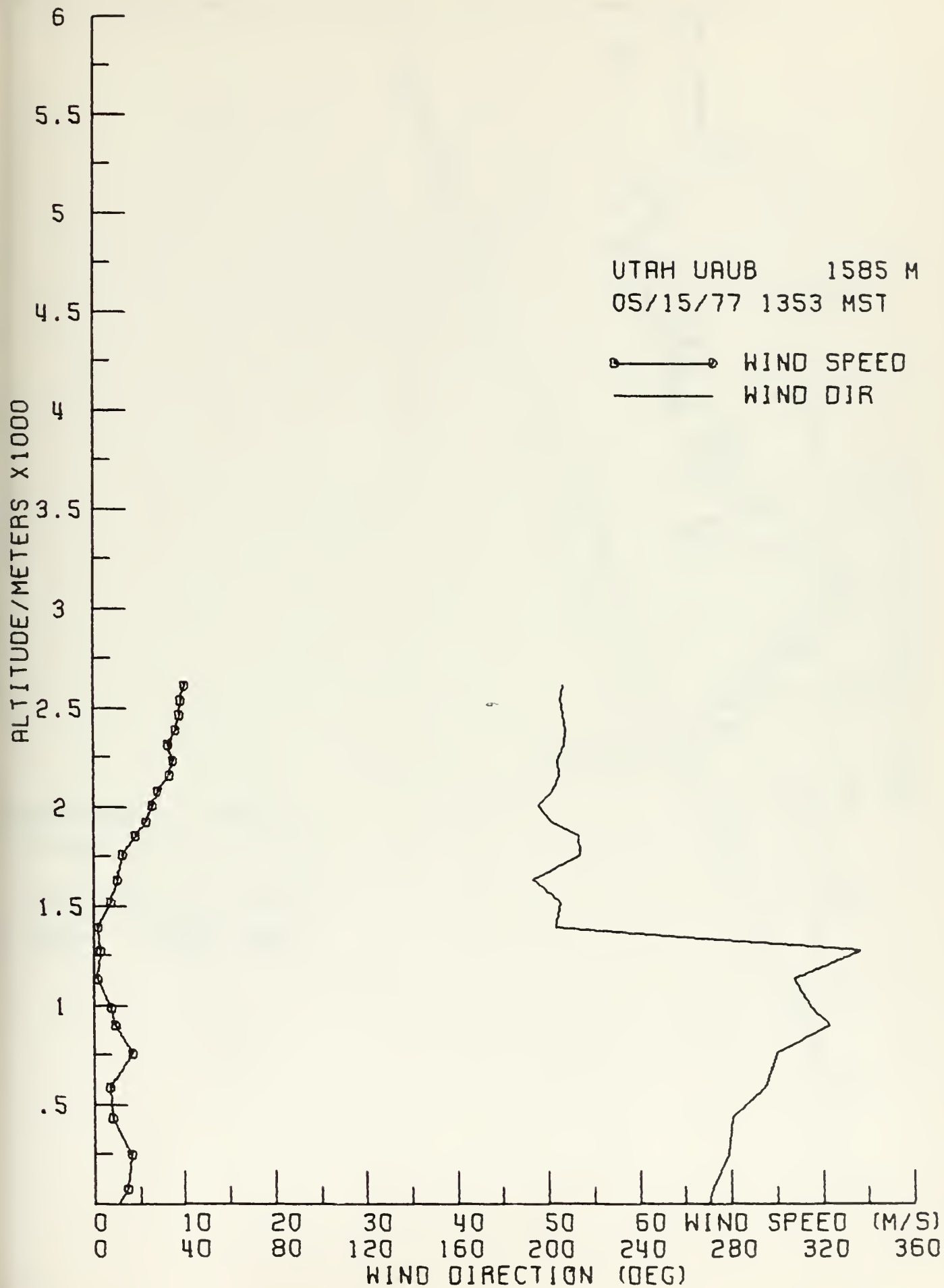
TEMPERATURE DEG/C


UTAH UAUB 1585 M
05/15/77 1353 MST
WIND SPEED
WIND DIR
ALTITUDE/METERS X1000
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4
3.5
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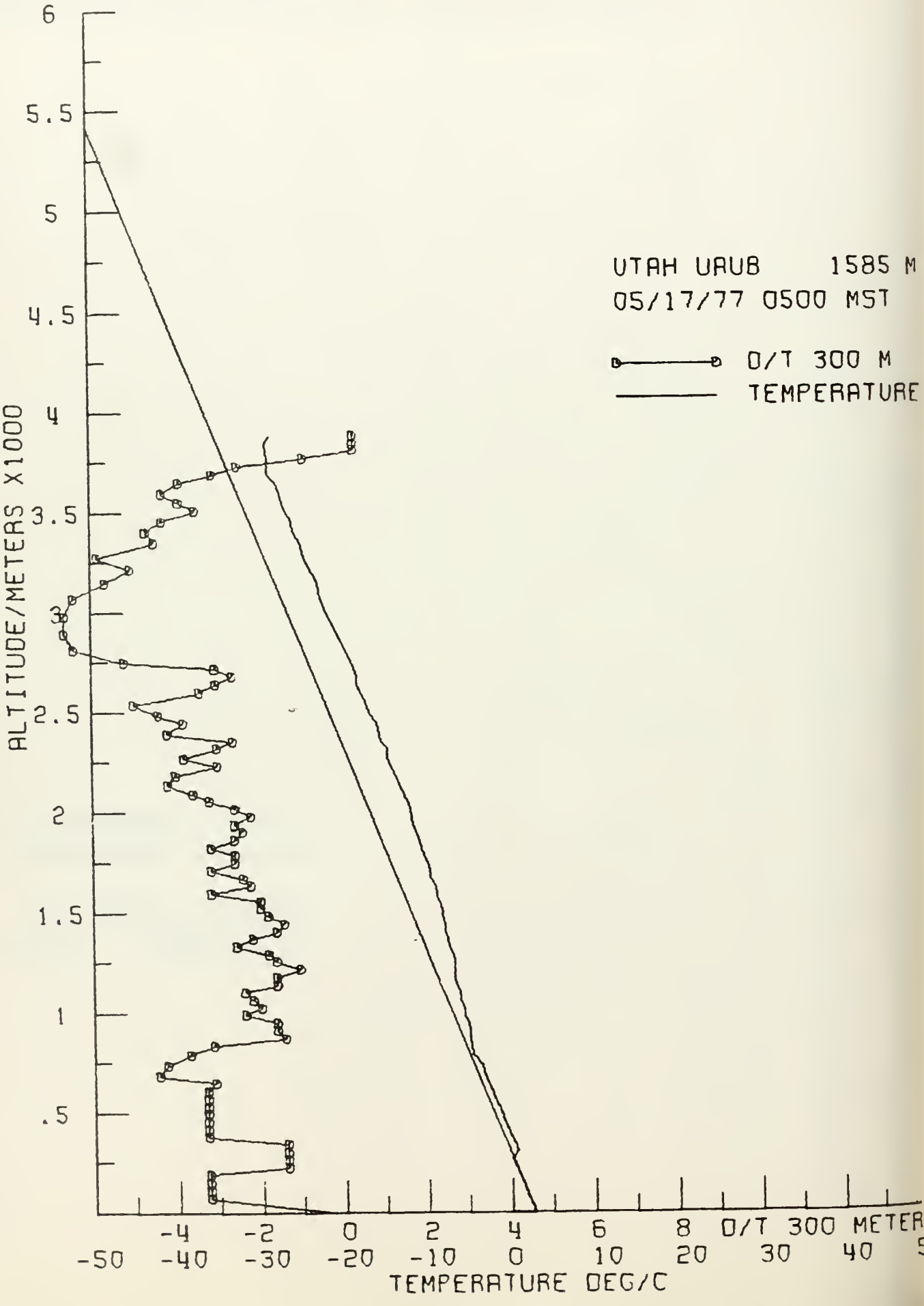
0 10 20 30 40 50 60 WIND SPEED (M/S)
0 40 80 120 160 200 240 280 320 360
WIND DIRECTION (DEG)


UTAH UAUB 1585 M
05/17/77 0500 MST
O/T 300 M
TEMPERATURE
ALTITUDE/METERS X1000
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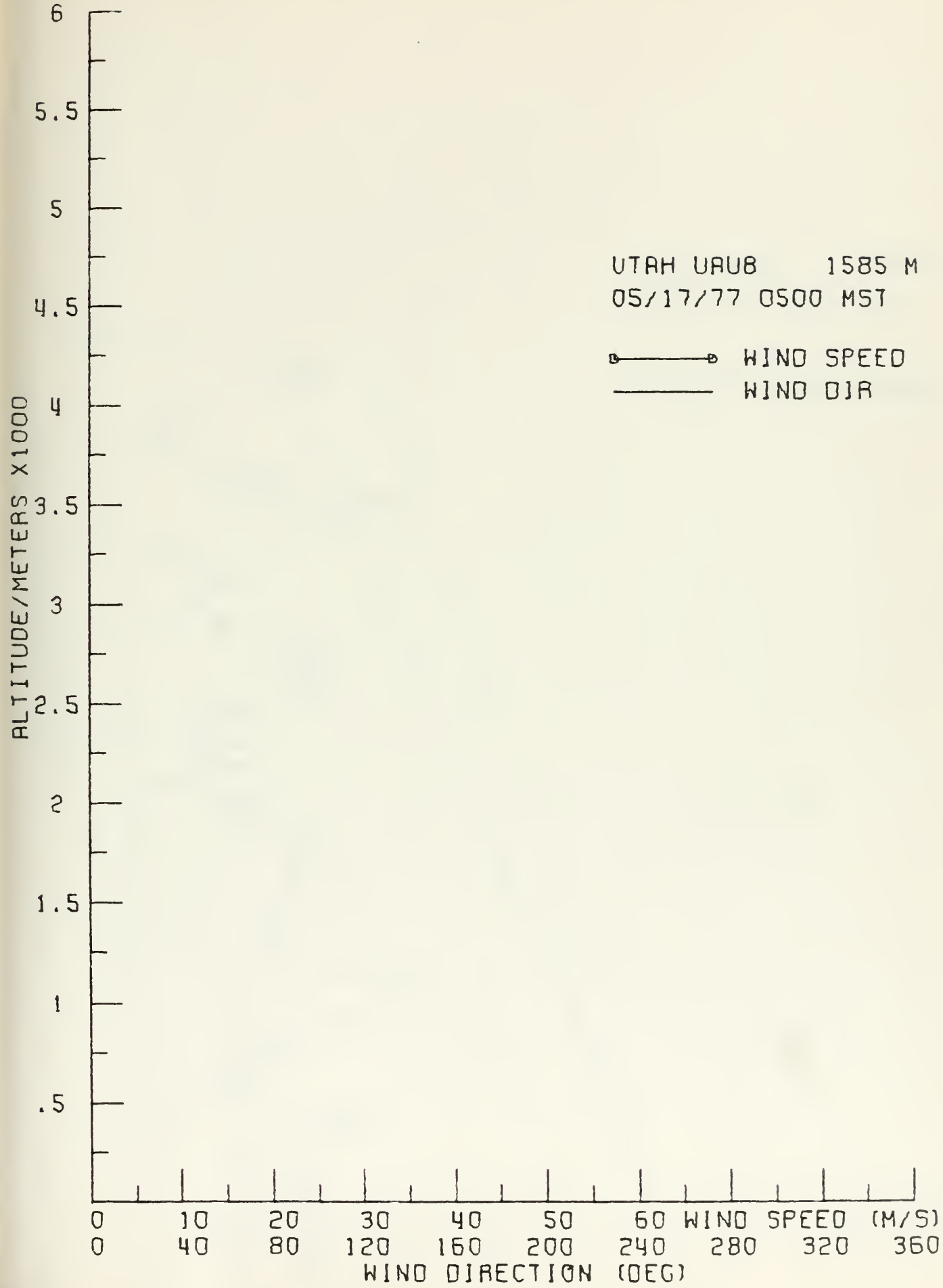
-50 -40 -30 -20 -10 0 10 20 30 40 50
TEMPERATURE DEG/C


UTAH UAUB 1585 M
05/17/77 0500 MST
WIND SPEED
WIND DIR
ALTITUDE/METERS X1000
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4.5
4
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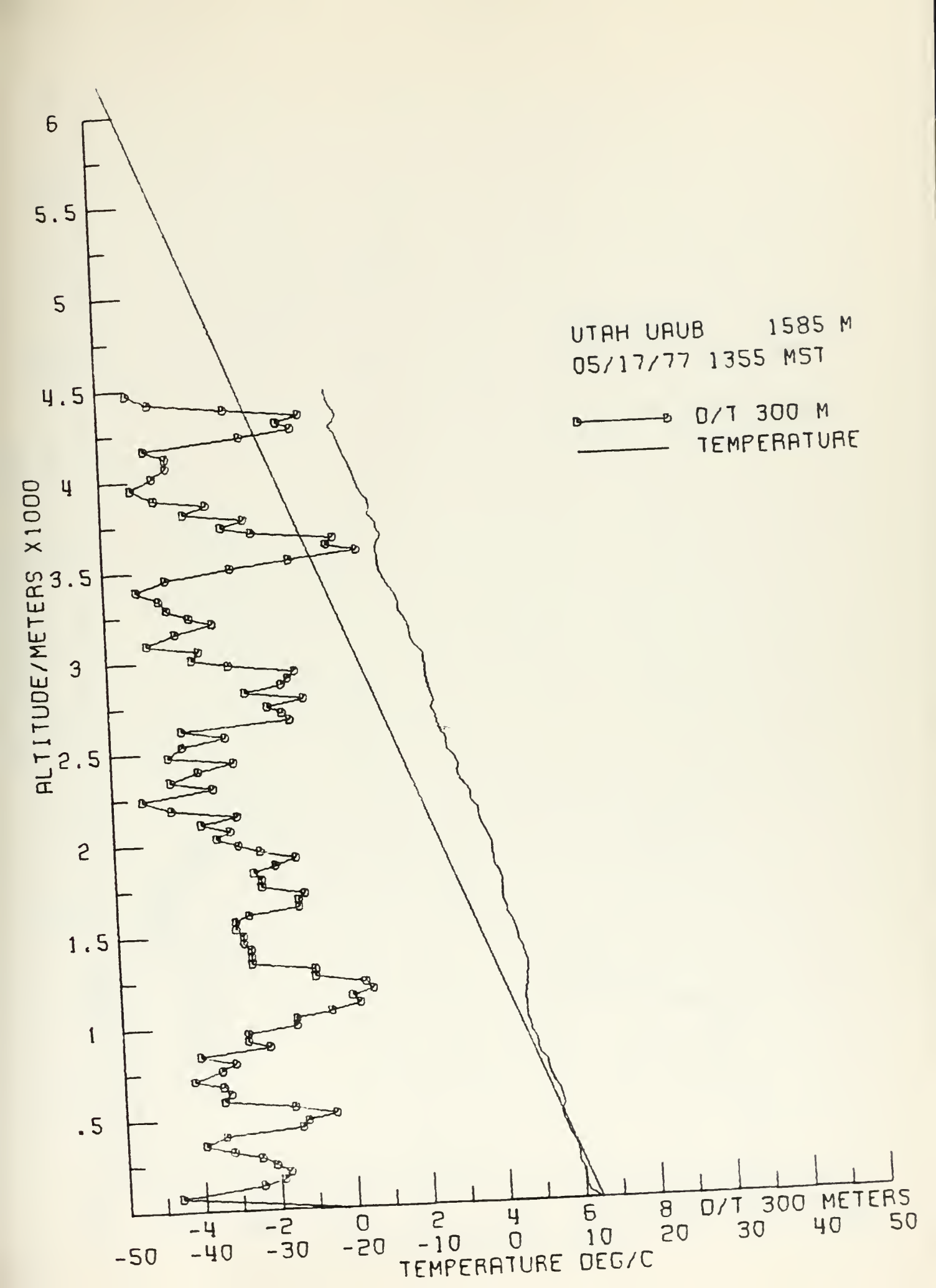
0 10 20 30 40 50 60 WIND SPEED (M/S)
0 40 80 120 160 200 240 280 320 360
WIND DIRECTION (DEG)


UTAH UAUB 1585 M
05/17/77 1355 MST
D/T 300 M
TEMPERATURE
ALTITUDE/METERS X1000
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-2
0
2
4
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D/T 300 METERS
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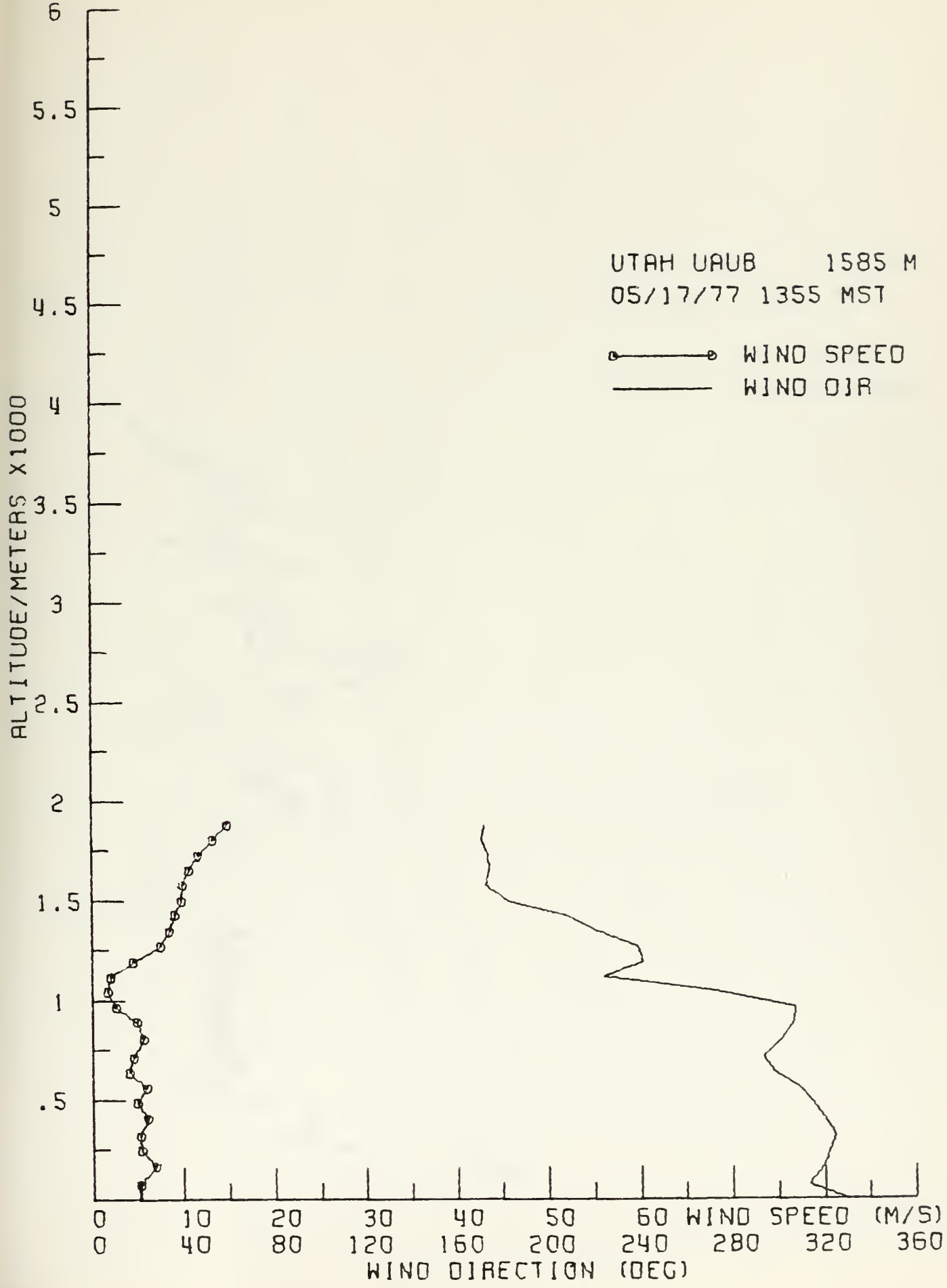
50
TEMPERATURE DEG/C


UTAH UAUB 1585 M
05/17/77 1355 MST
WIND SPEED
WIND DIR
ALTITUDE/METERS X1000
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4
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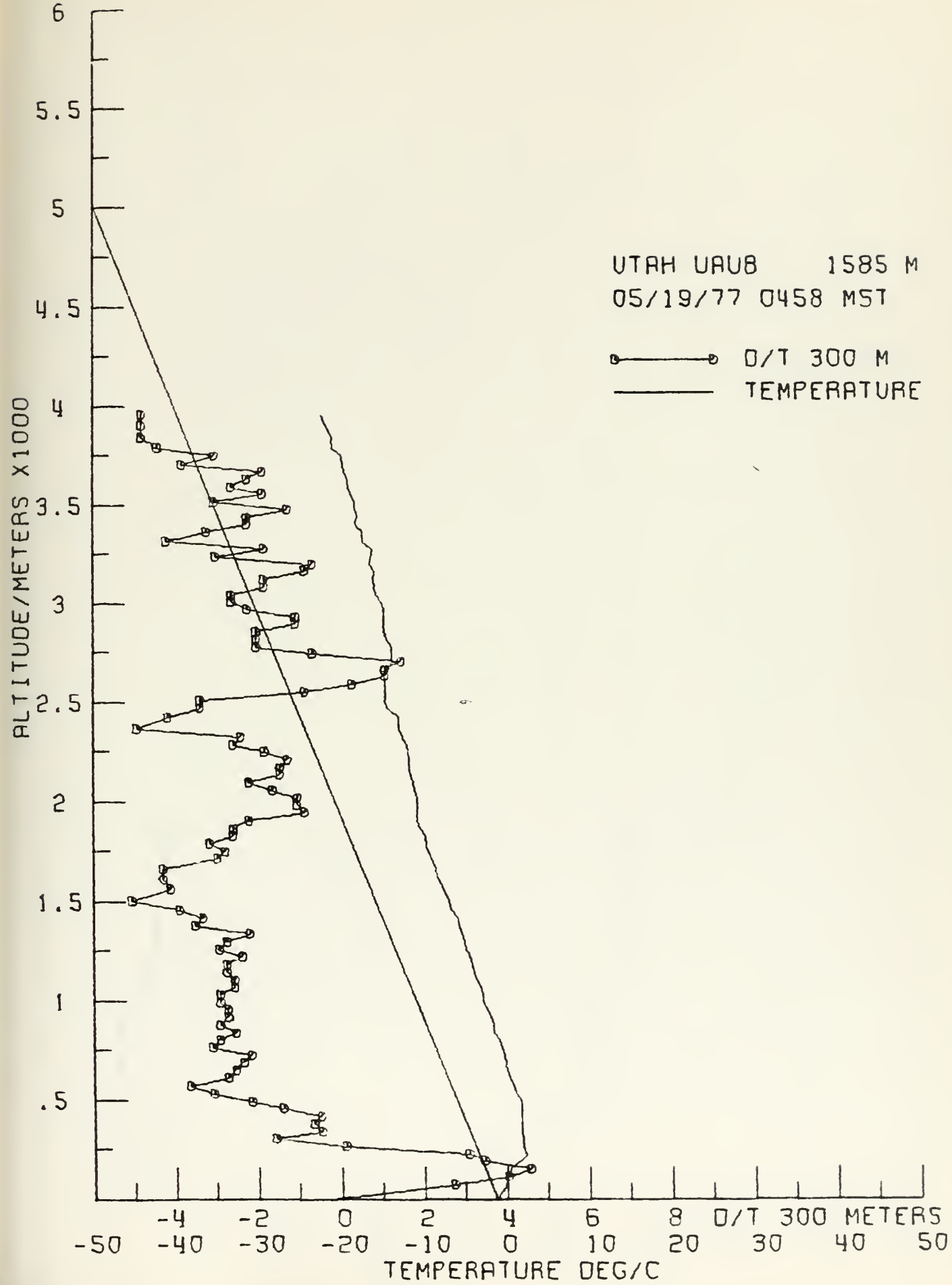
0 10 20 30 40 50 60 WIND SPEED (M/S)
0 40 80 120 160 200 240 280 320 360
WIND DIRECTION (DEG)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05/19/77 0458 MST
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ALTITUDE/METERS X1000
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1.5
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.5
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4
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D/T 300 METERS
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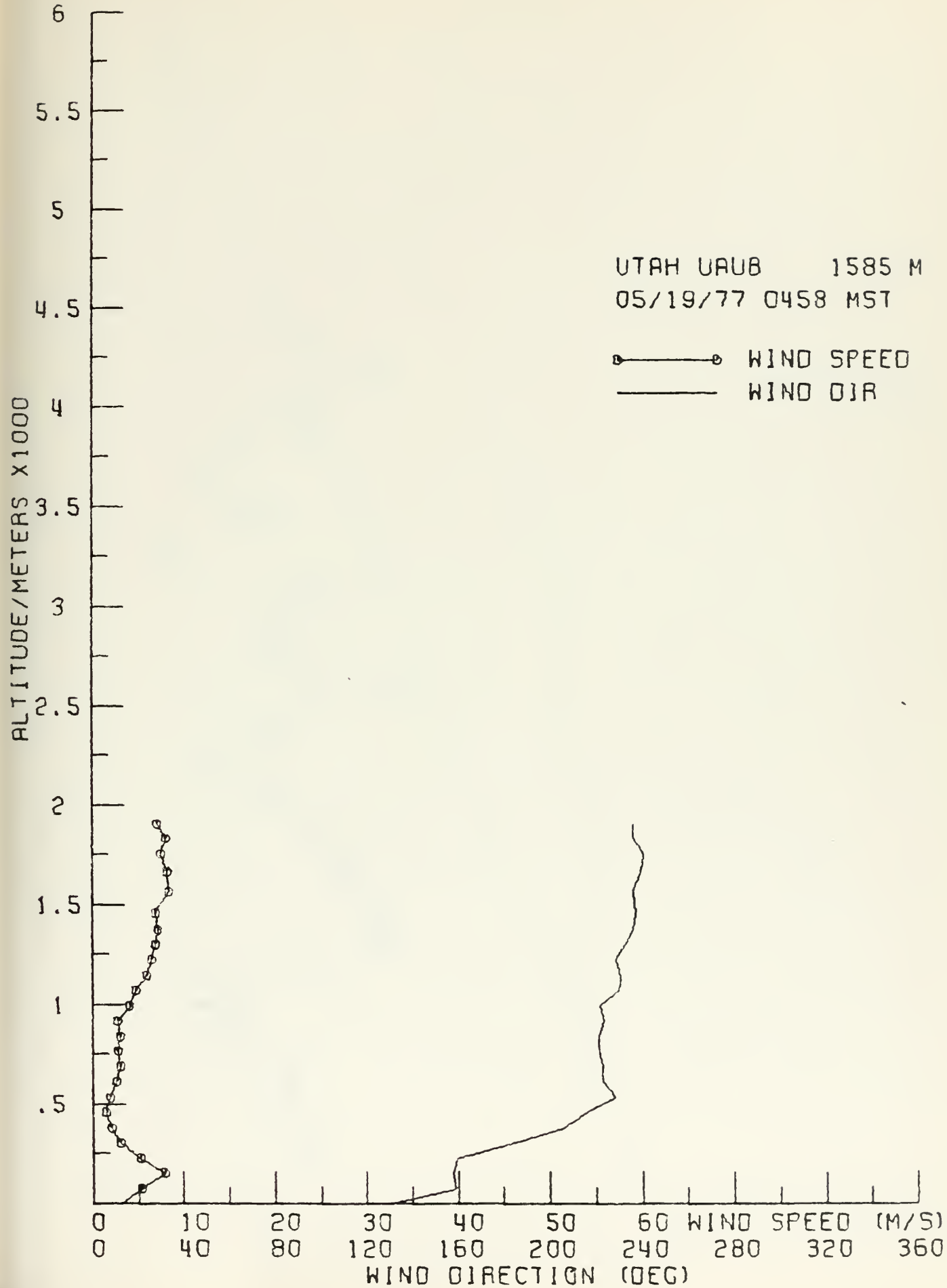
50
TEMPERATURE DEG/C


UTAH UAUB 1585 M
05/19/77 0458 MST
WIND SPEED
WIND DIR
ALTITUDE/METERS X1000
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4.5
4
3.5
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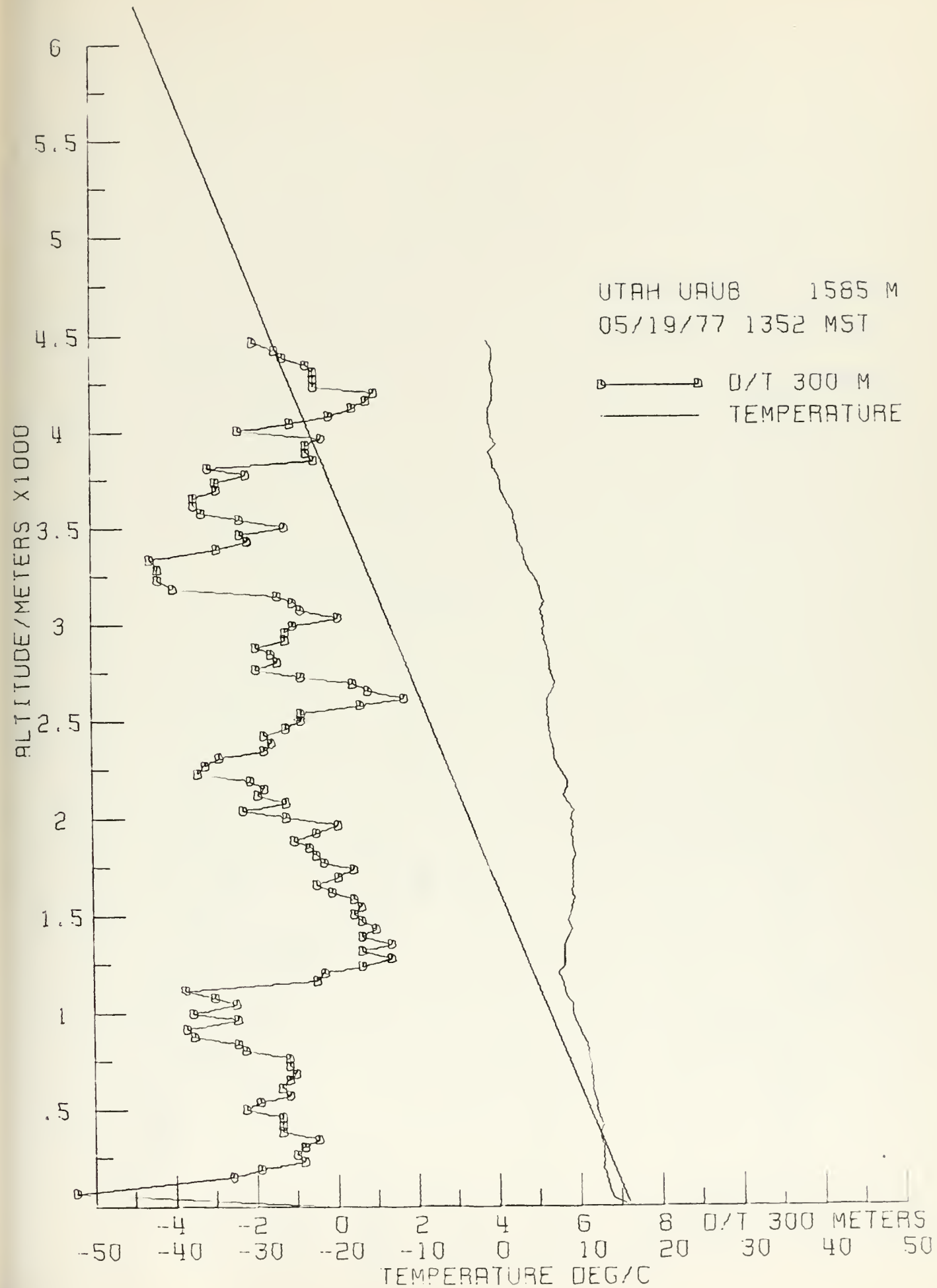
.5
0 10 20 30 40 50 60 WIND SPEED (M/S)
0 40 80 120 160 200 240 280 320 360
WIND DIRECTION (DEG)


UTAH UAU8 1585 M
05/19/77 1352 MST
D/T 300 M
TEMPERATURE
ALTITUDE/METERS X1000
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2.5
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1.5
1
.5
0
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-2
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2
4
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D/T 300 METERS
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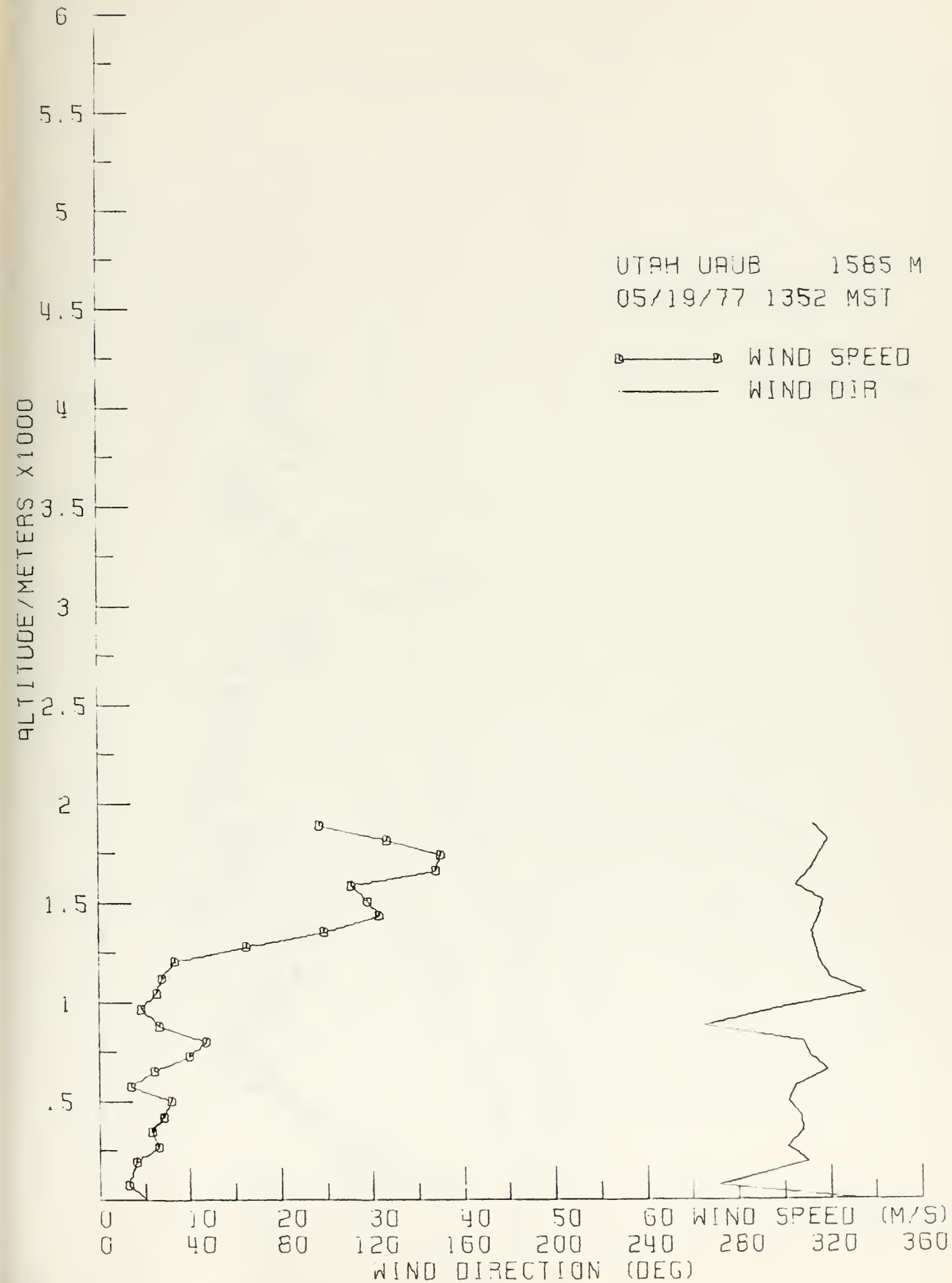
TEMPERATURE DEG/C


UTAH UAUB 1585 M
05/19/77 1352 MST
WIND SPEED
WIND DIR
ALTITUDE/METERS X1000
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4.5
4
3.5
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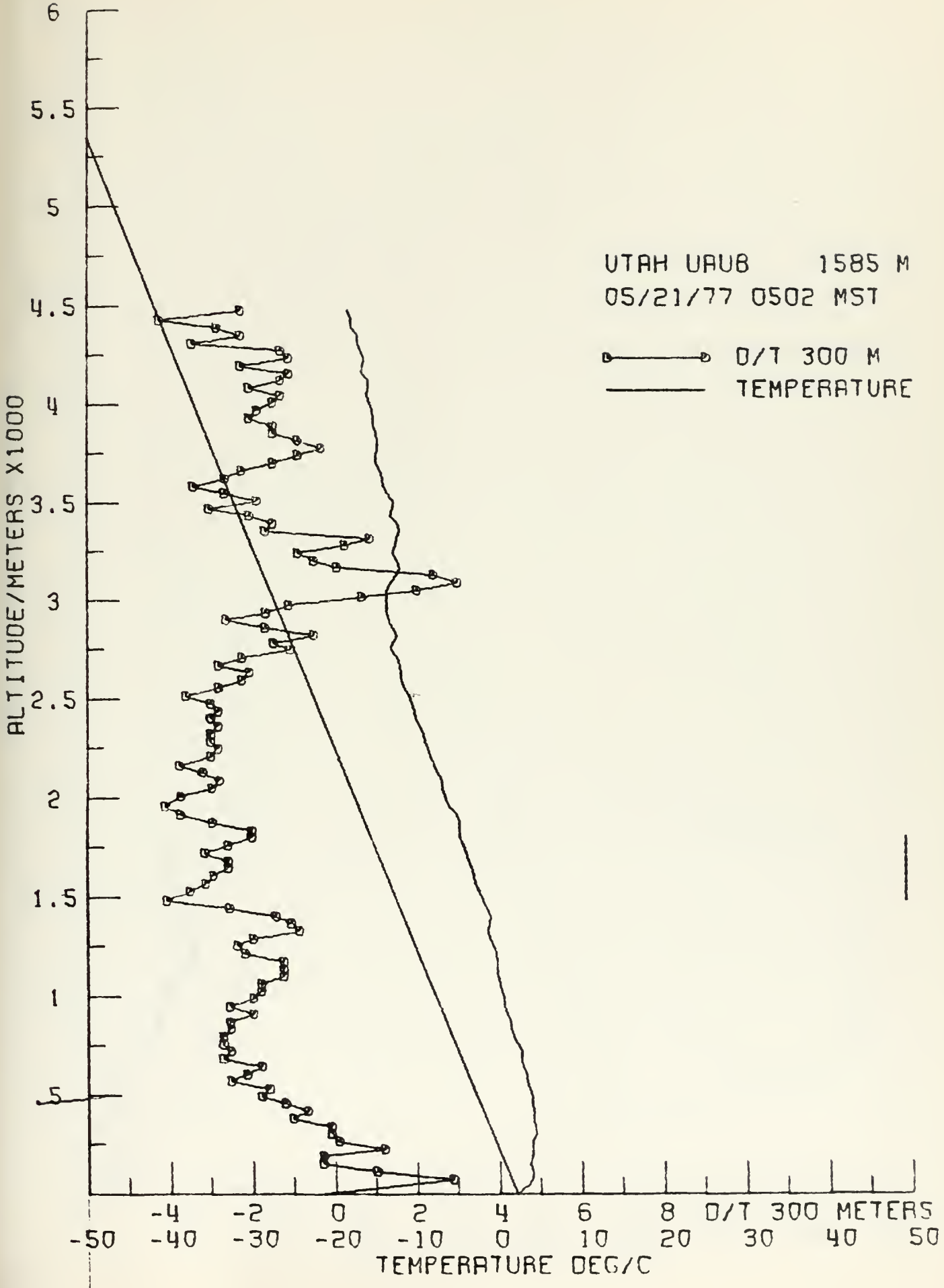
0 10 20 30 40 50 60 WIND SPEED (M/S)
0 40 80 120 160 200 240 280 320 360
WIND DIRECTION (DEG)


UTAH UAUB 1585 M
05/21/77 0502 MST
D/T 300 M
TEMPERATURE
ALTITUDE/METERS X1000
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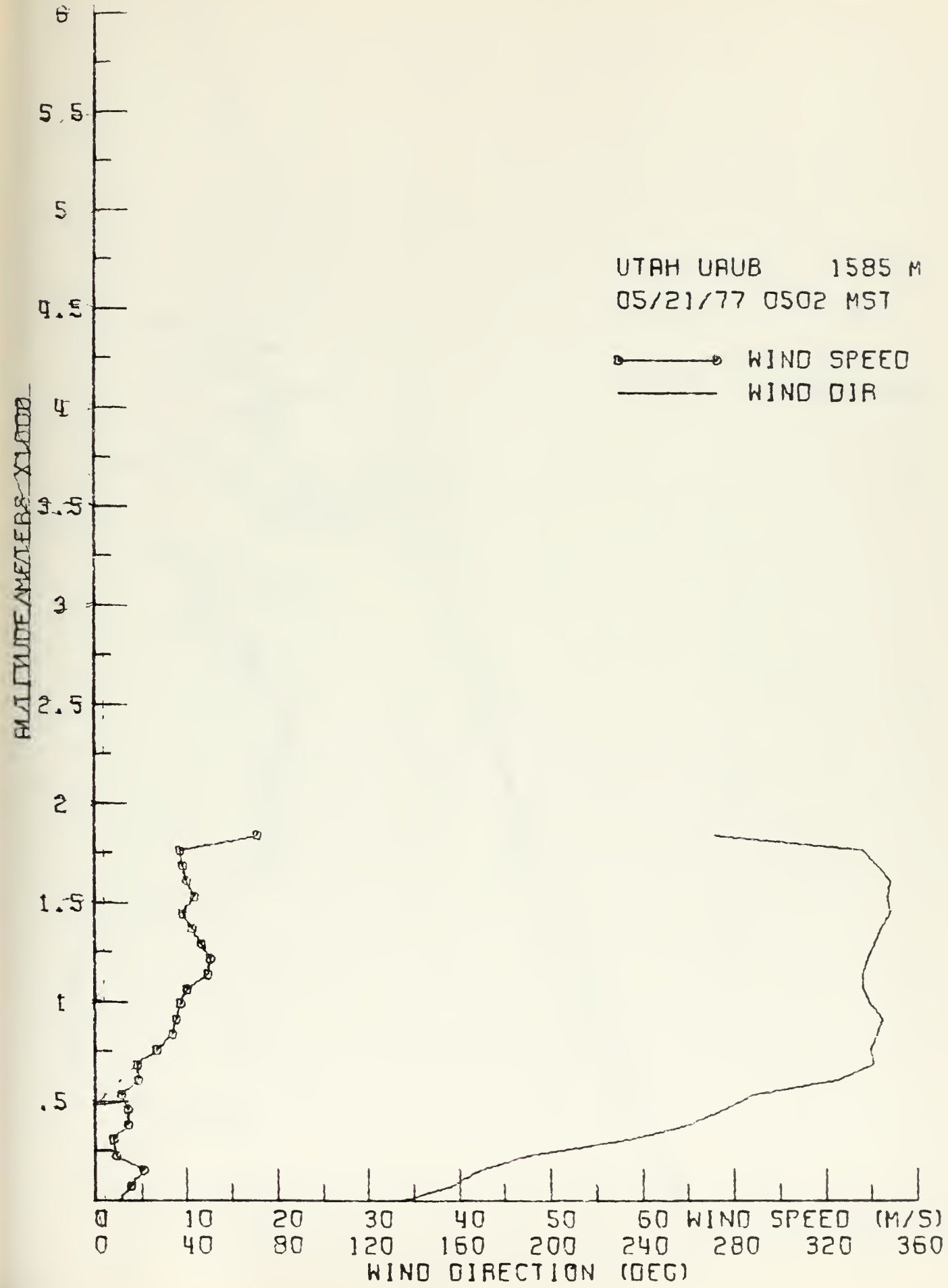
TEMPERATURE DEG/C


UTAH UAUB 1585 M
05/21/77 0502 MST
WIND SPEED
WIND DIR
ALTITUDE/METERS X1000
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4.5
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3.5
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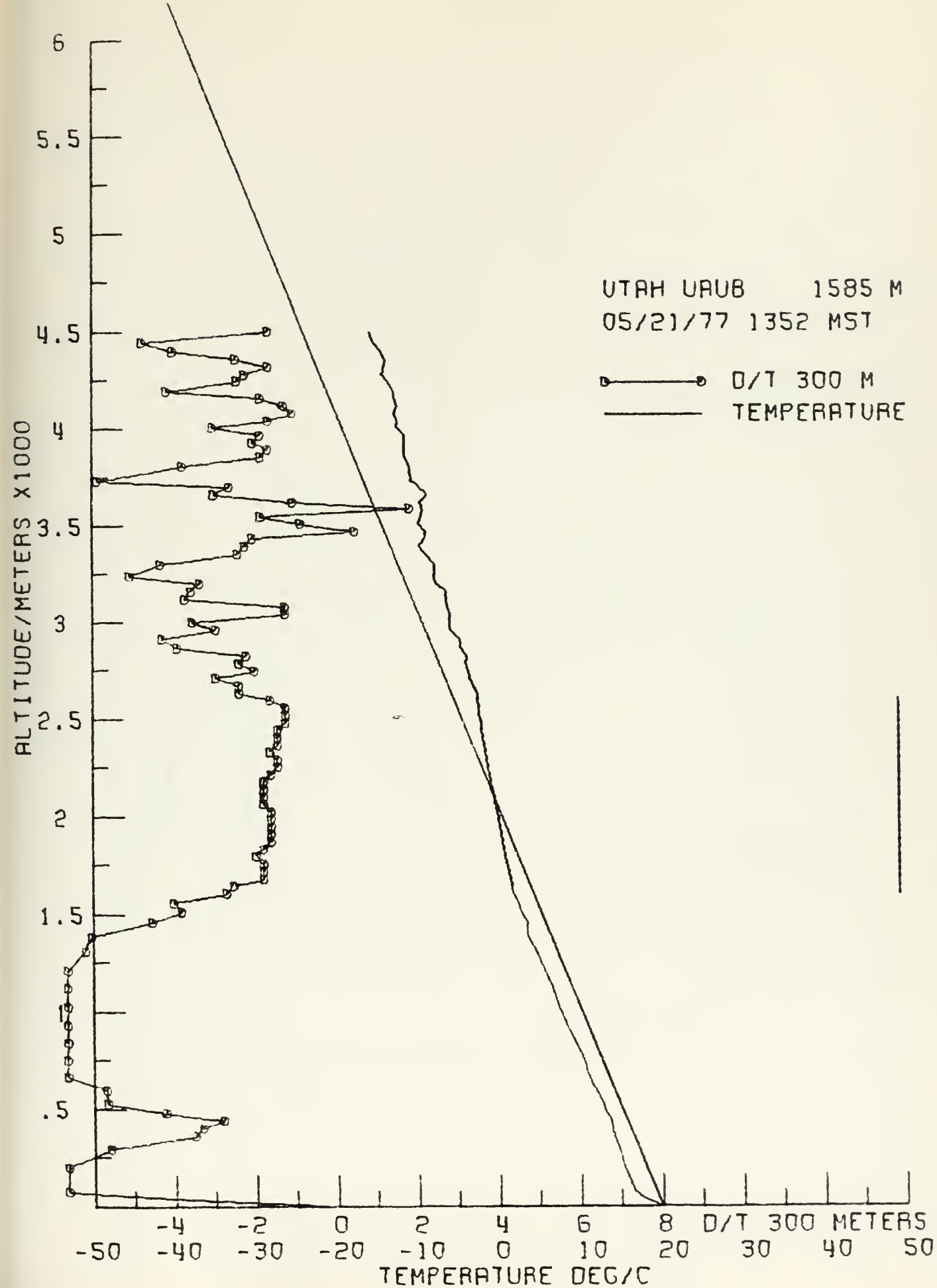
0 10 20 30 40 50 60 WIND SPEED (M/S)
0 40 80 120 160 200 240 280 320 360
WIND DIRECTION (DEG)


UTAH UAUB 1585 M
05/21/77 1352 MST
D/T 300 M
TEMPERATURE
ALTITUDE/METERS X1000
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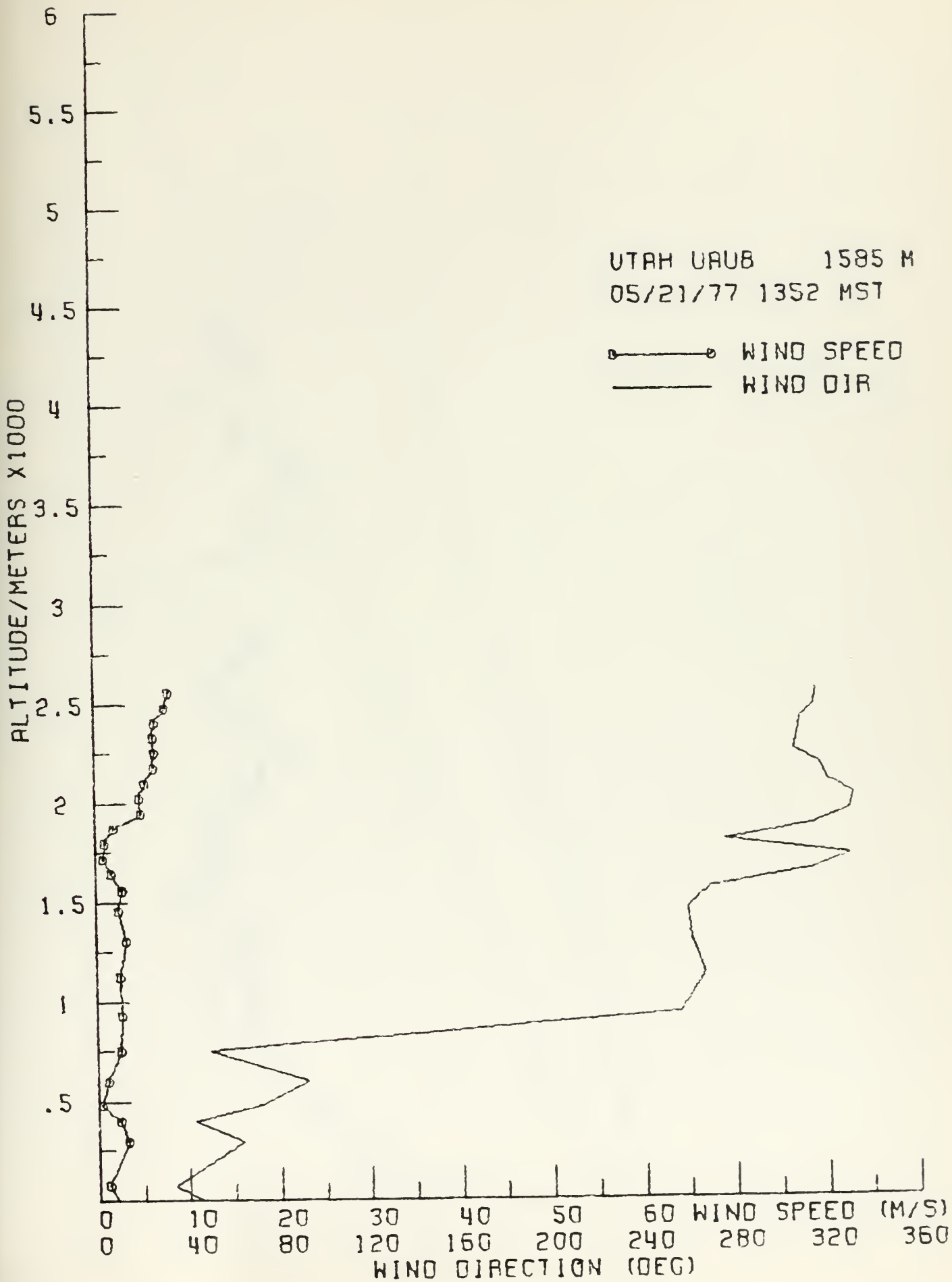
TEMPERATURE DEG/C


UTAH UAUB 1585 M
05/21/77 1352 MST
WIND SPEED
WIND DIR
ALTITUDE/METERS X1000
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3.5
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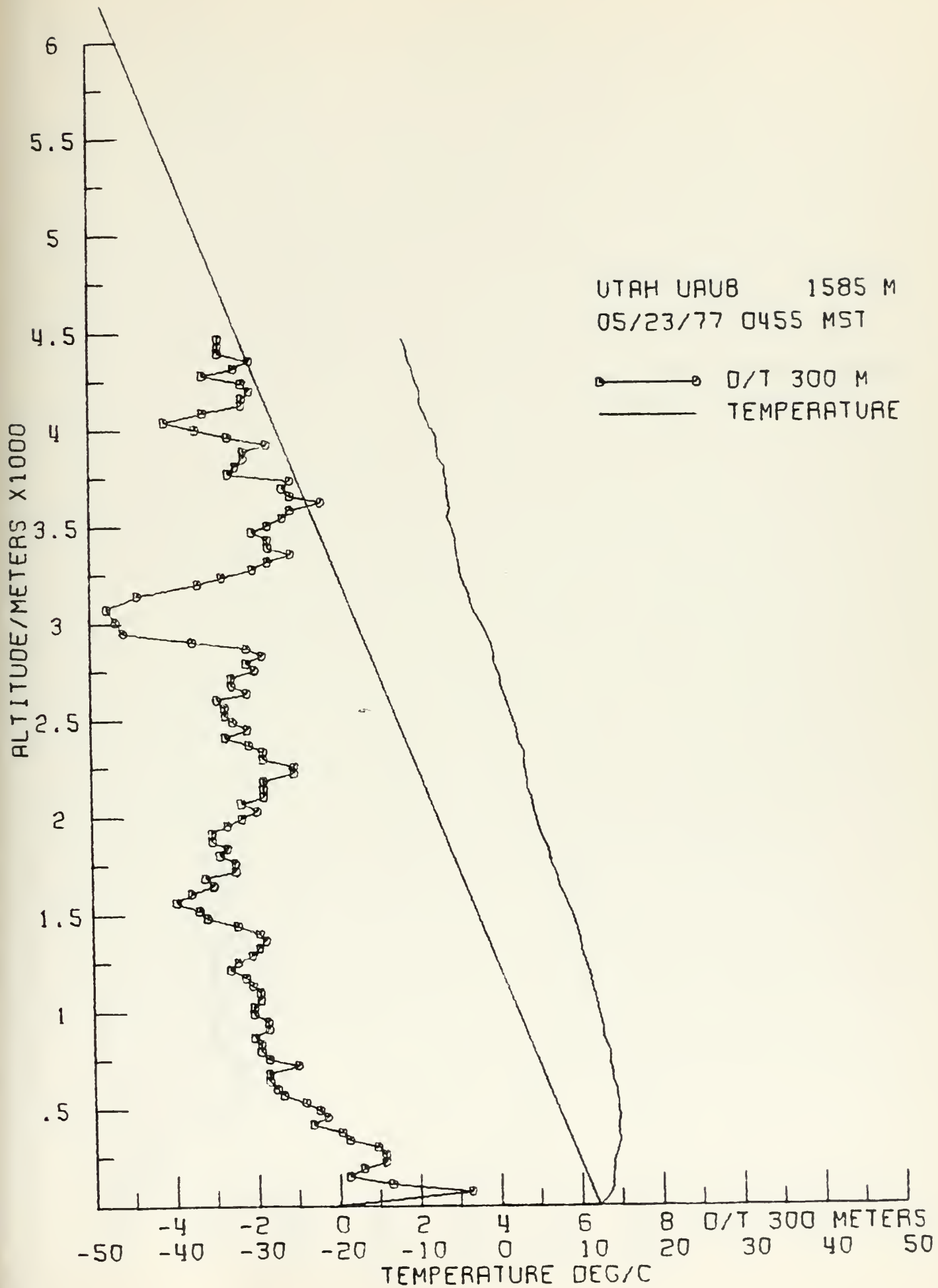
0 10 20 30 40 50 60 WIND SPEED (M/S)
0 40 80 120 160 200 240 280 320 360
WIND DIRECTION (DEG)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05/23/77 0455 MST
D/T 300 M
TEMPERATURE
ALTITUDE/METERS X1000
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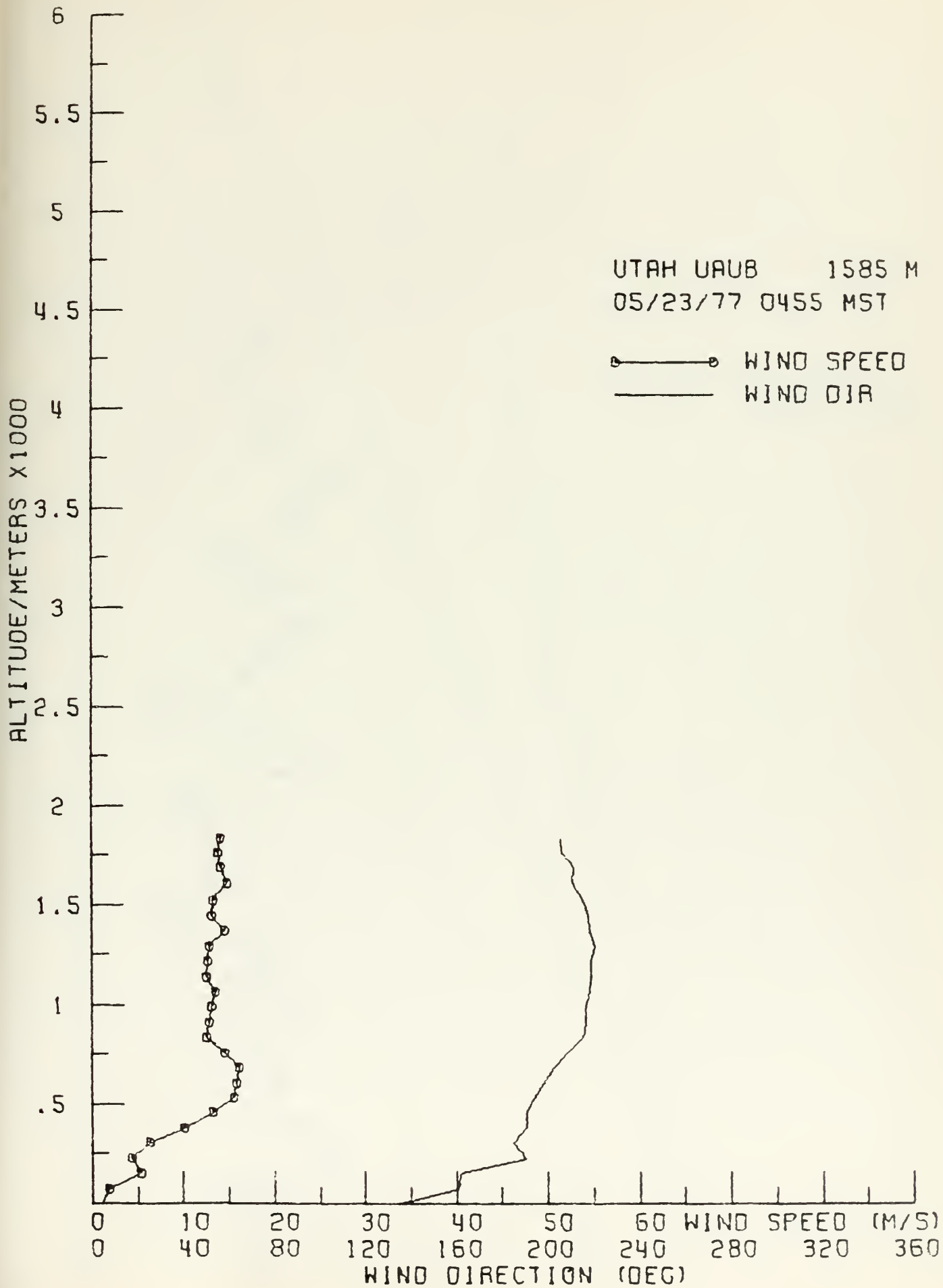
TEMPERATURE DEG/C


UTAH UAUB 1585 M
05/23/77 0455 MST
WIND SPEED
WIND DIR
ALTITUDE/METERS X1000
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4.5
4
3.5
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1
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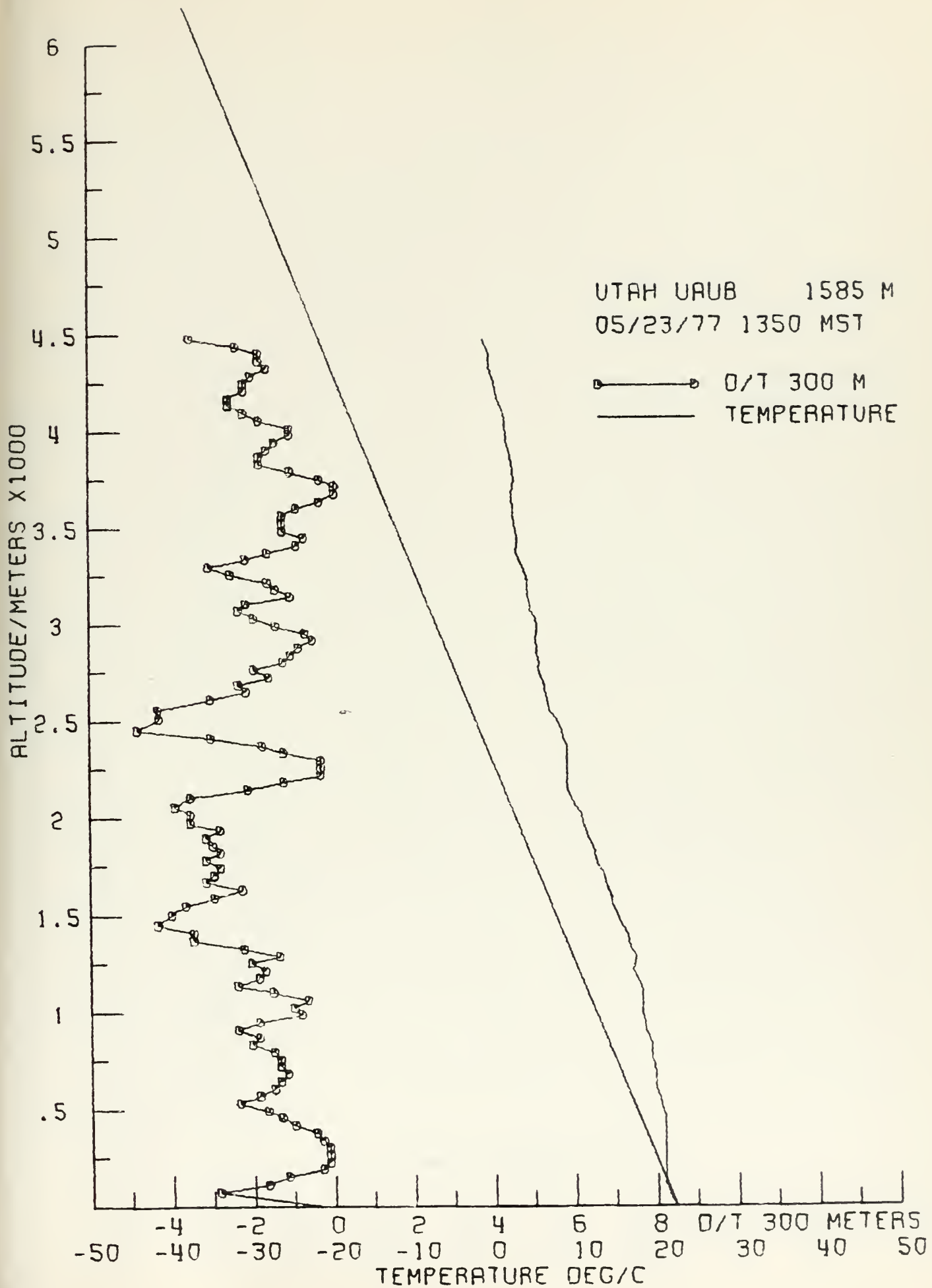
0 10 20 30 40 50 60 WIND SPEED (M/S)
0 40 80 120 160 200 240 280 320 360
WIND DIRECTION (DEG)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05/23/77 1350 MST
O/T 300 M
TEMPERATURE
ALTITUDE/METERS X1000
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1.5
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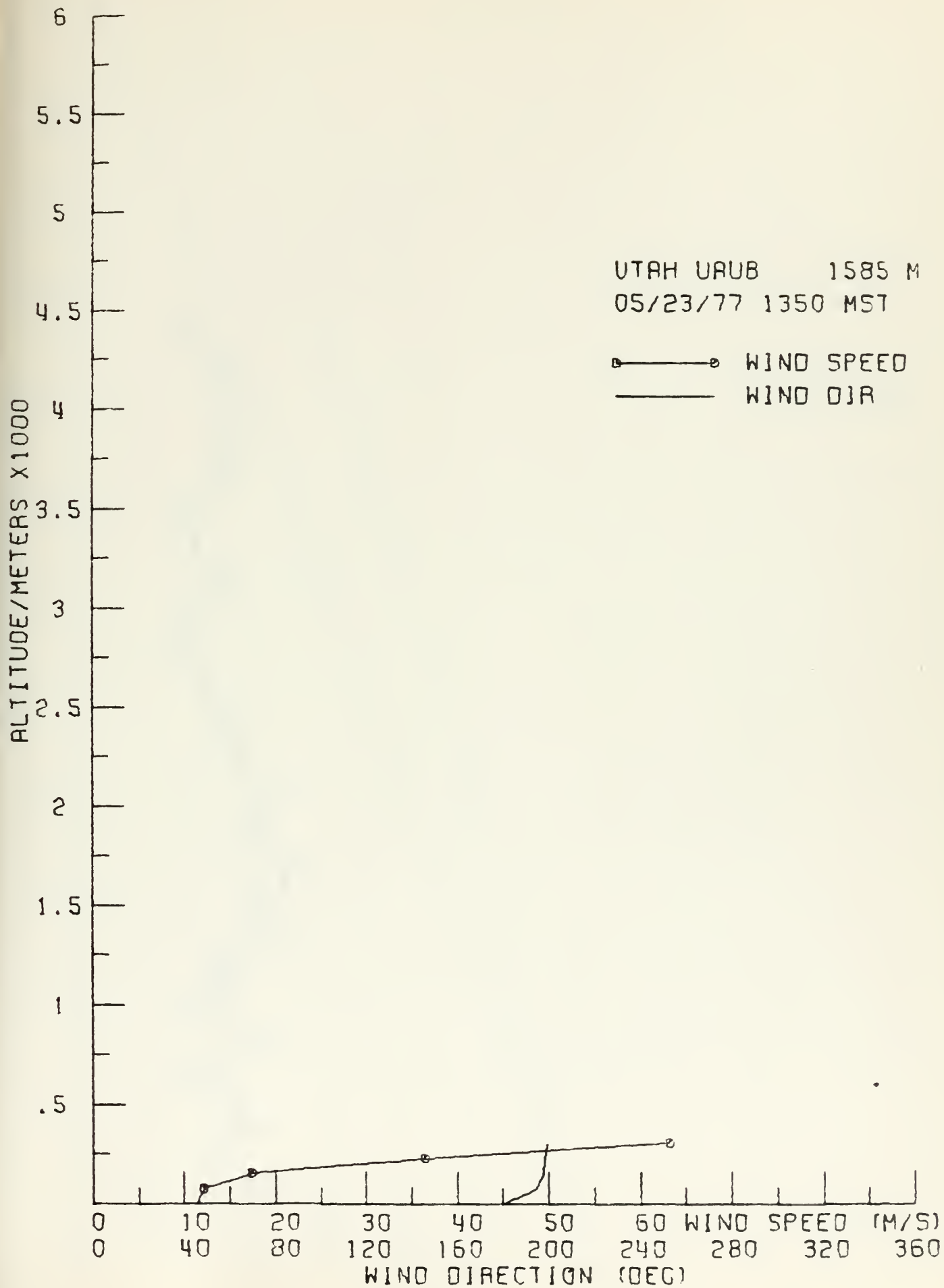
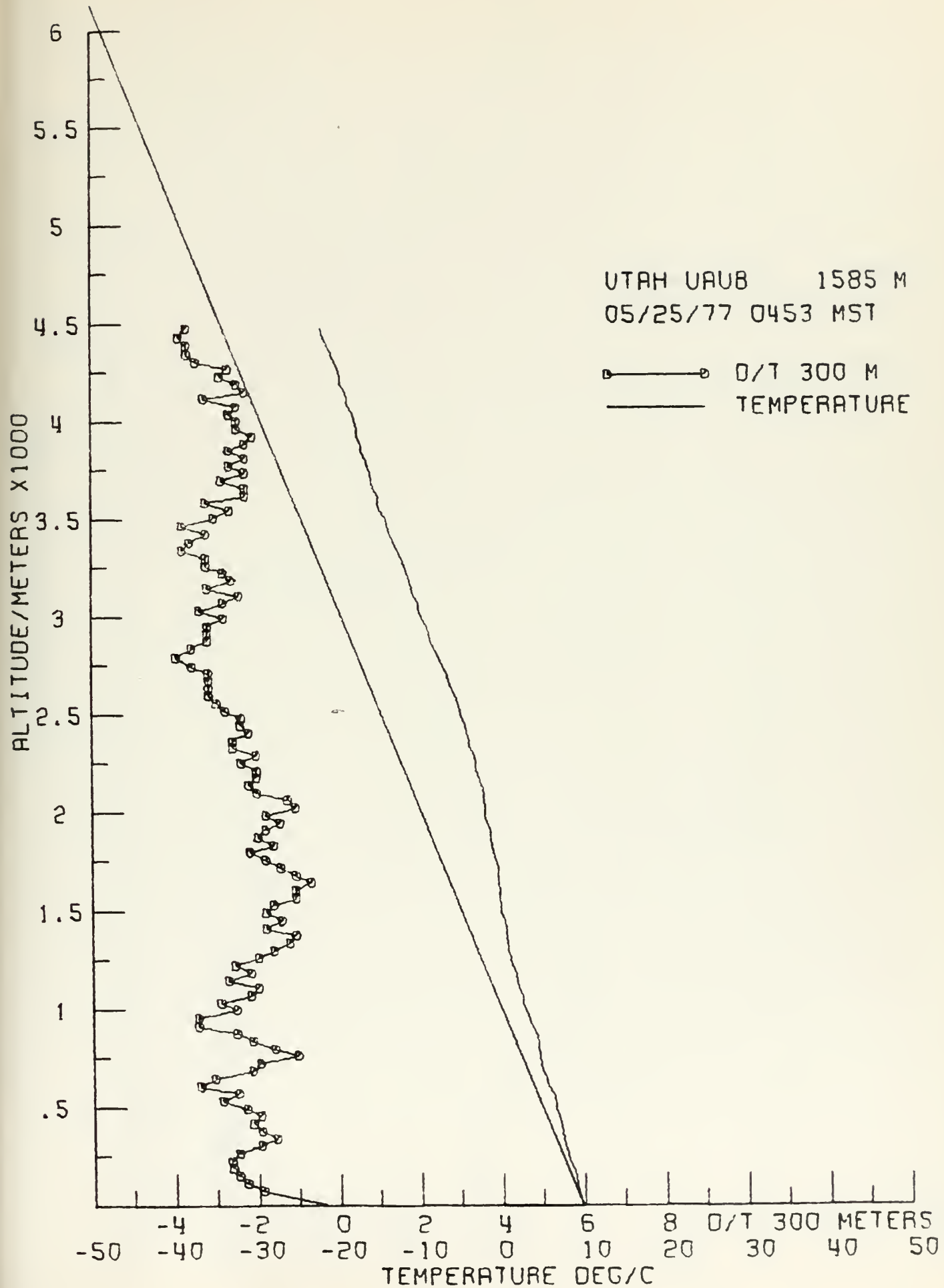
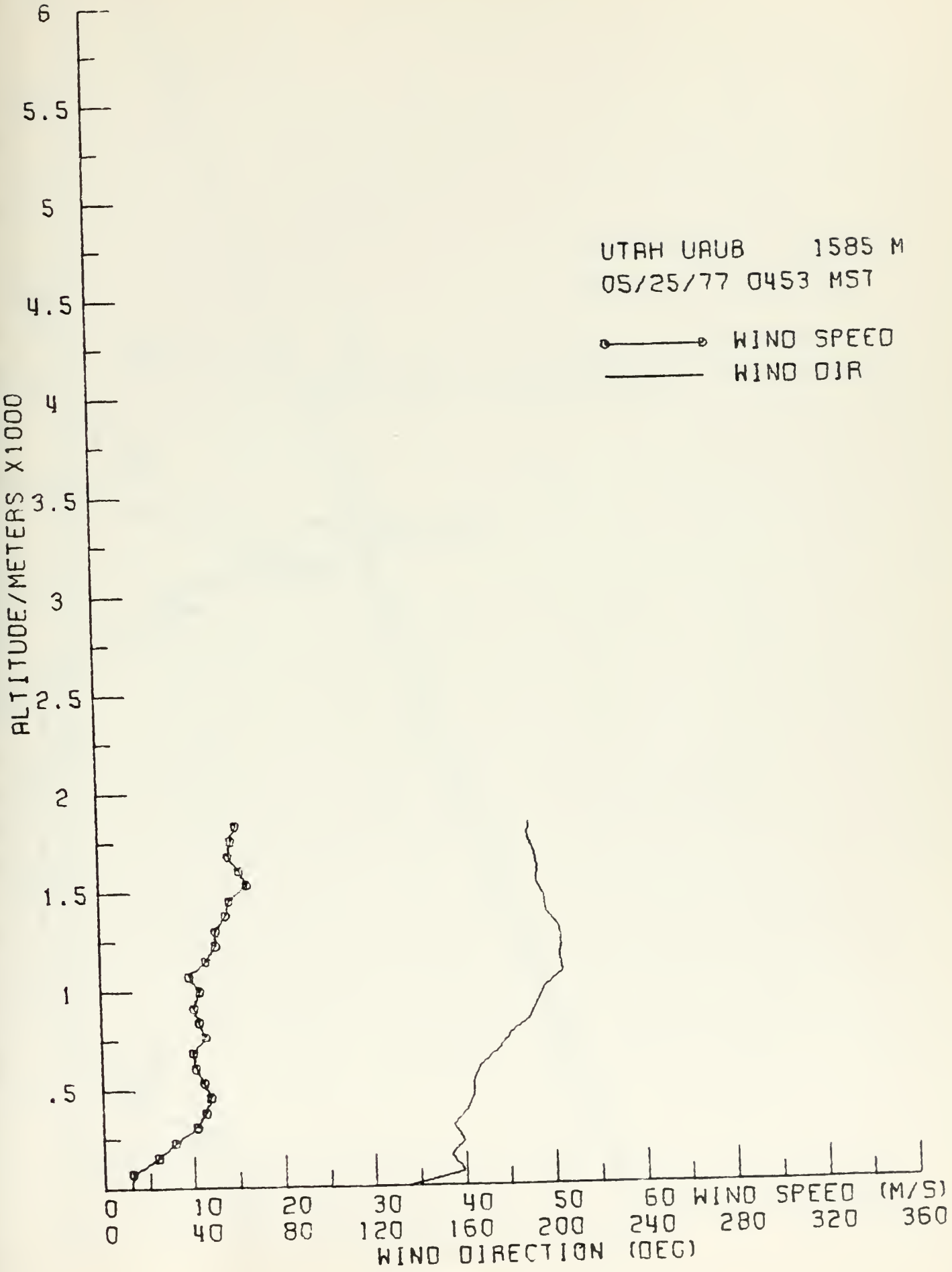
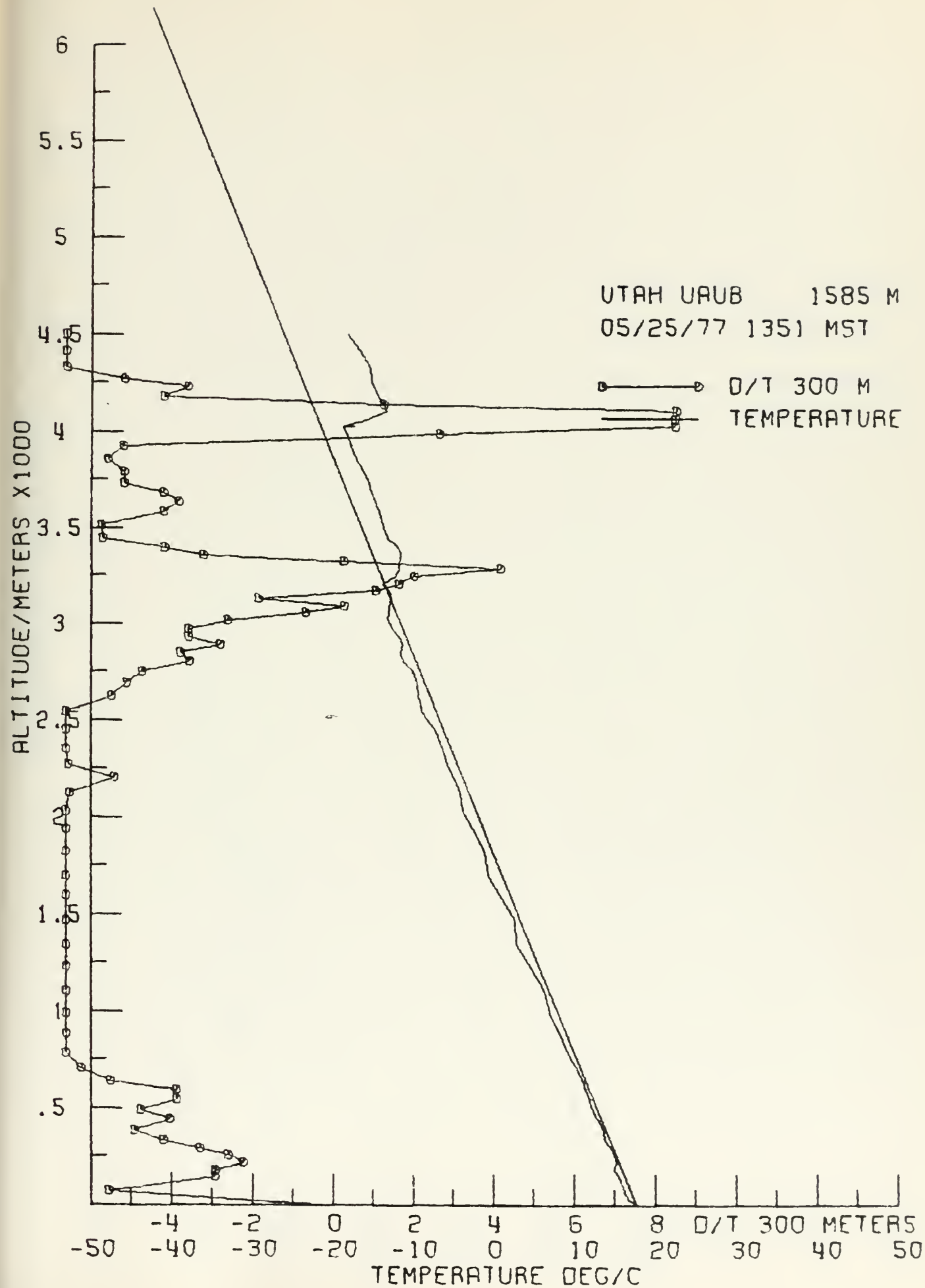
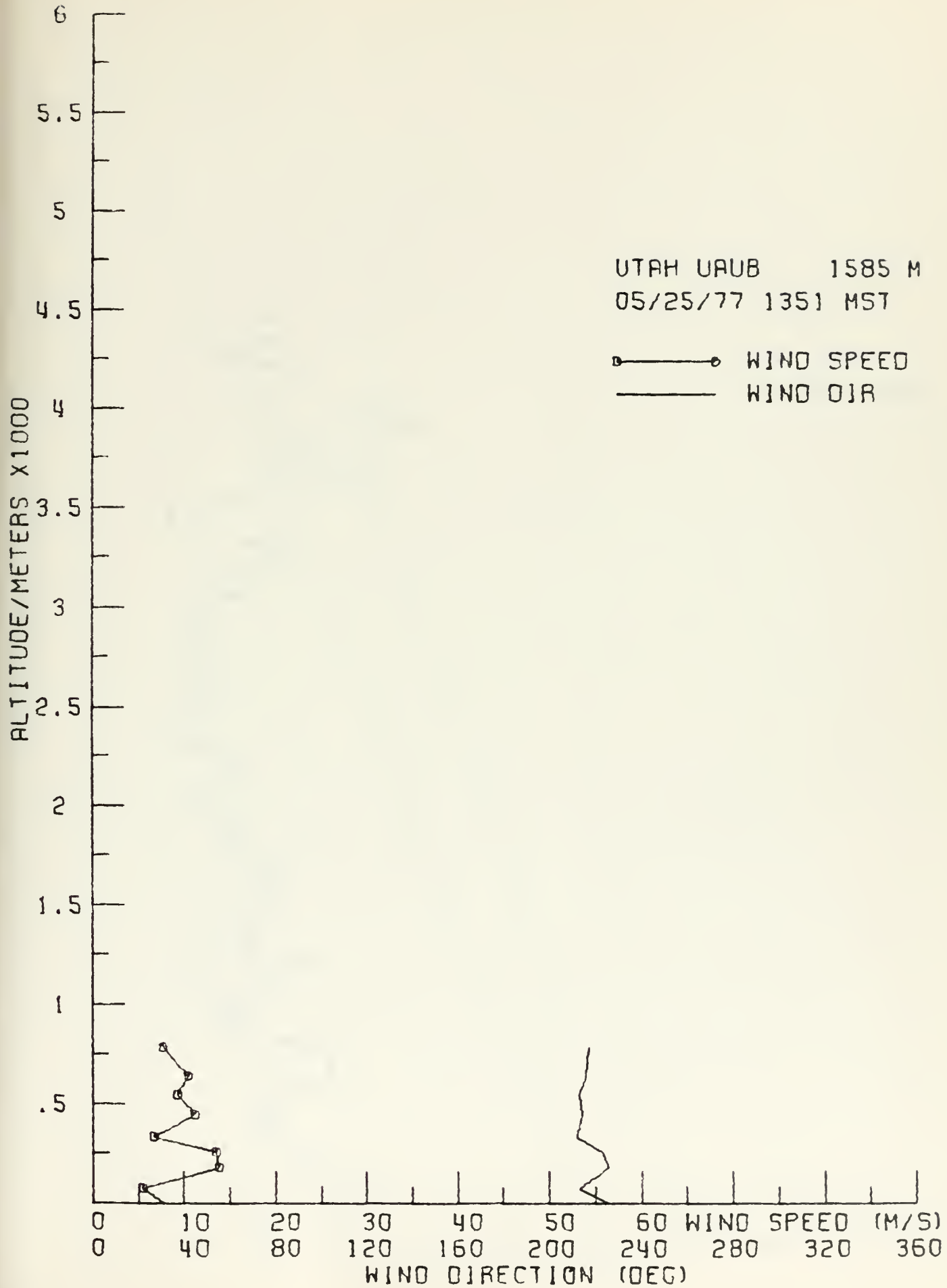
-50 -40 -30 -20 -10 0 10 20 30 40 50
TEMPERATURE DEG/C

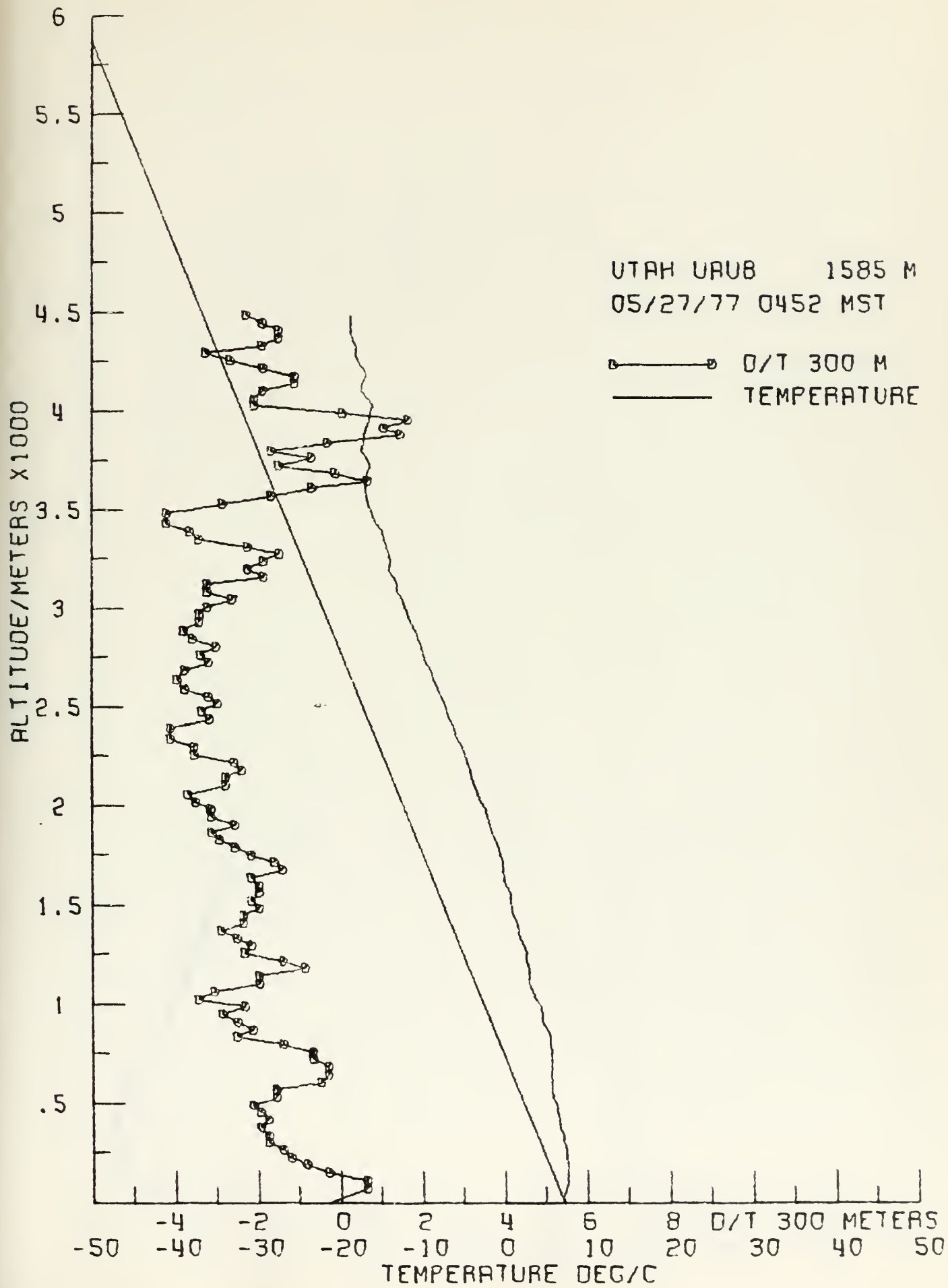

UTAH UAUB 1585 M
05/23/77 1350 MST
WIND SPEED
WIND DIR
ALTITUDE/METERS X1000
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
0 10 20 30 40 50 60 WIND SPEED (M/S)
0 40 80 120 160 200 240 280 320 360
WIND DIRECTION (DEG)


UTAH UAUB 1585 M
05/25/77 0453 MST
D/T 300 M
TEMPERATURE
ALTITUDE/METERS X1000
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
-4
-2
0
2
4
6
8
D/T 300 METERS
-50
-40
-30
-20
-10
0
10
20
30
40
50
TEMPERATURE DEG/C


UTAH UAUB 1585 M
05/25/77 0453 MST
WIND SPEED
WIND DIR
ALTITUDE/METERS X1000
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
0 10 20 30 40 50 60 WIND SPEED (M/S)
0 40 80 120 160 200 240 280 320 360
WIND DIRECTION (DEG)


UTAH UAUB 1585 M
05/25/77 1351 MST
D/T 300 M
TEMPERATURE
ALTITUDE/METERS X1000
6
5.5
5
4.5
4
3.5
3
2
1.5
1
.5
-4
-2
0
2
4
6
8
D/T 300 METERS
-50
-40
-30
-20
-10
0
10
20
30
40
50
TEMPERATURE DEG/C


UTAH UAUB 1585 M
05/25/77 1351 MST
WIND SPEED
WIND DIR
ALTITUDE/METERS X1000
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
0 10 20 30 40 50 60 WIND SPEED (M/S)
0 40 80 120 160 200 240 280 320 360
WIND DIRECTION (DEG)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05/27/77 0452 MST
D/T 300 M
TEMPERATURE
ALTITUDE/METERS X1000
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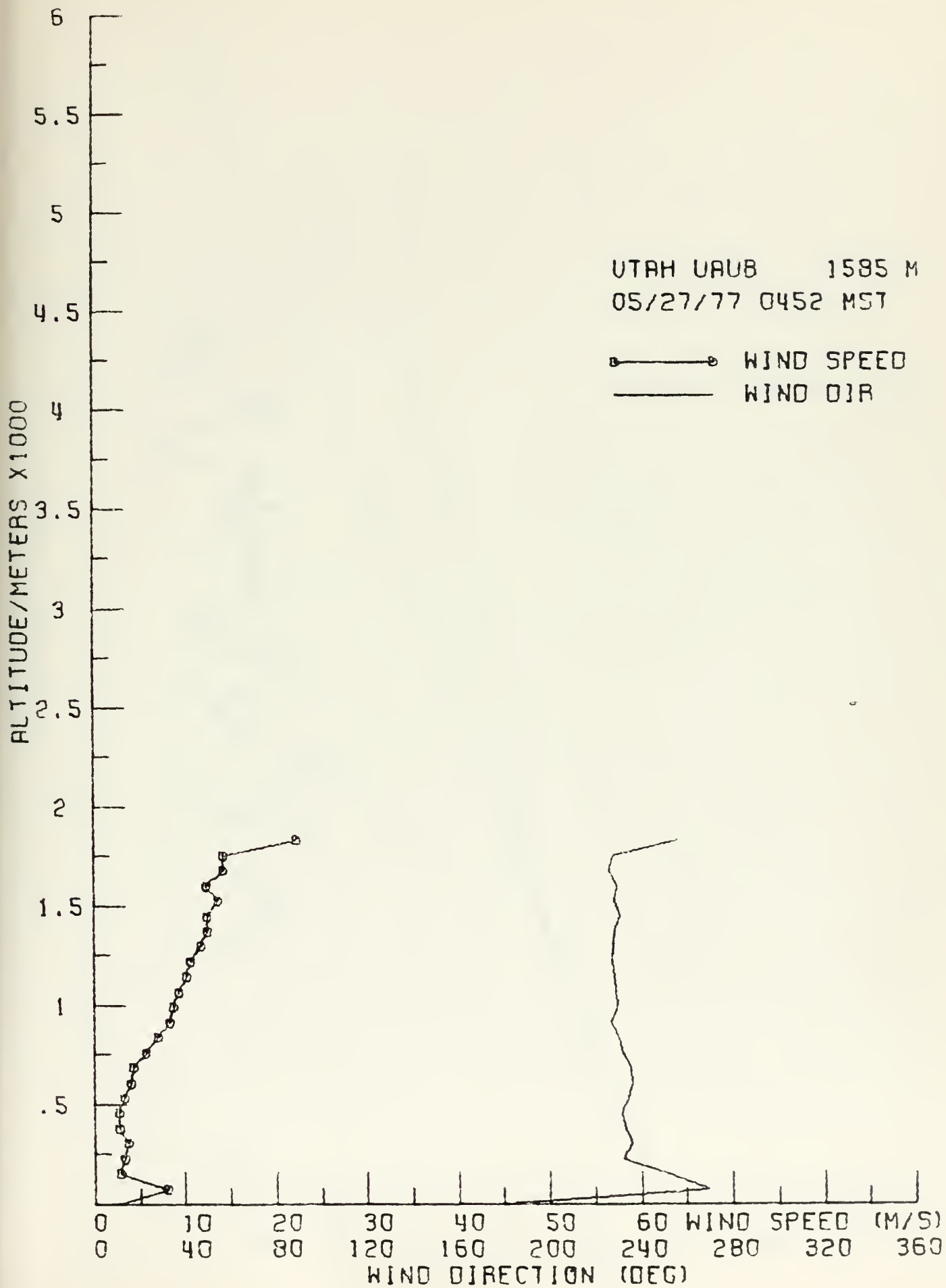
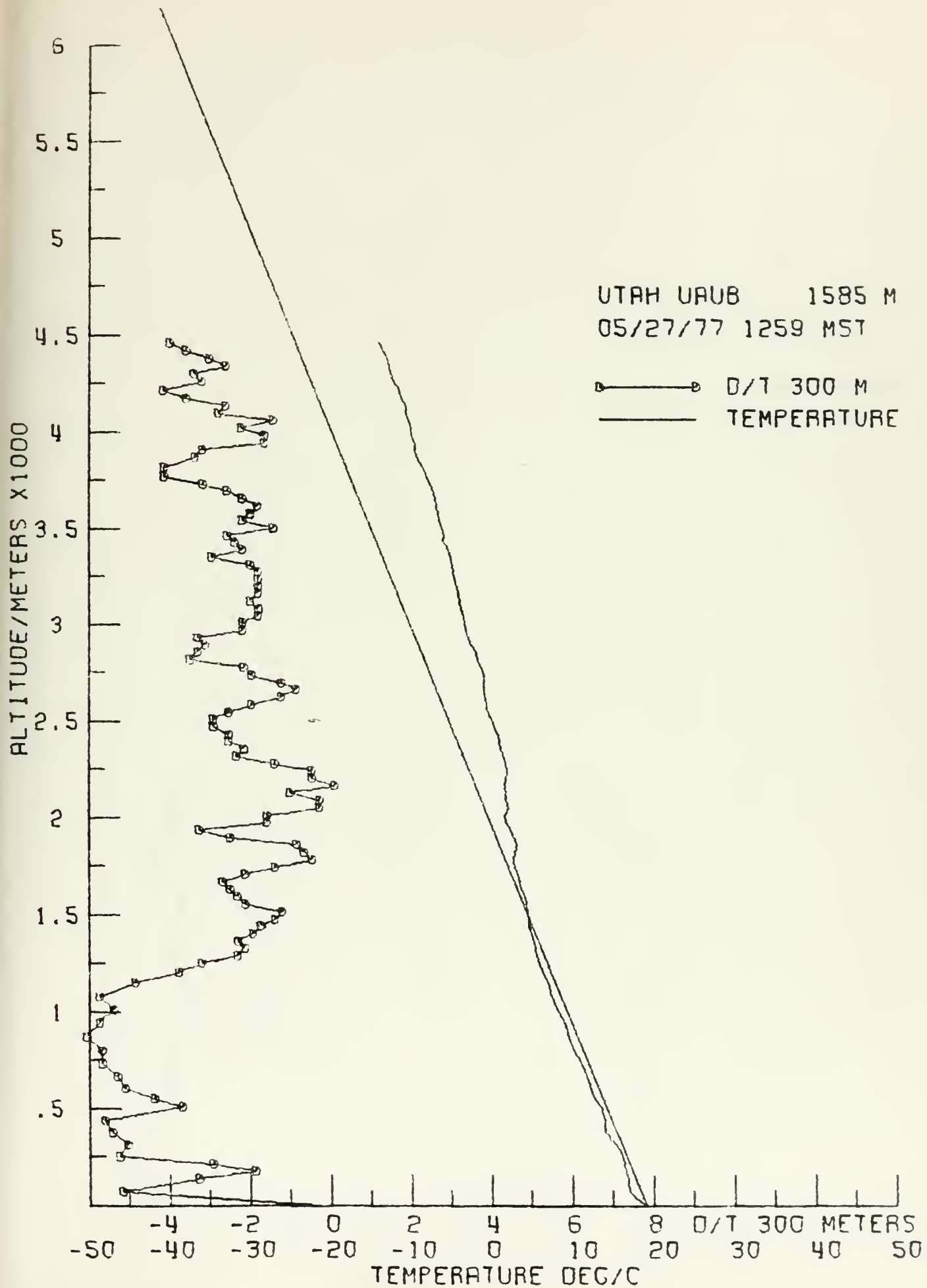
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
-4
-2
0
2
4
6
8
D/T 300 METERS
-50
-40
-30
-20
-10
0
10
20
30
40
50
TEMPERATURE DEG/C


UTAH UAUB 1585 M
05/27/77 0452 MST
WIND SPEED
WIND DIR
ALTITUDE/METERS X1000
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
0 10 20 30 40 50 60 WIND SPEED (M/S)
0 40 80 120 160 200 240 280 320 360
WIND DIRECTION (DEG)


UTAH UAUB 1585 M
05/27/77 1259 MST
D/T 300 M
TEMPERATURE
ALTITUDE/METERS X1000
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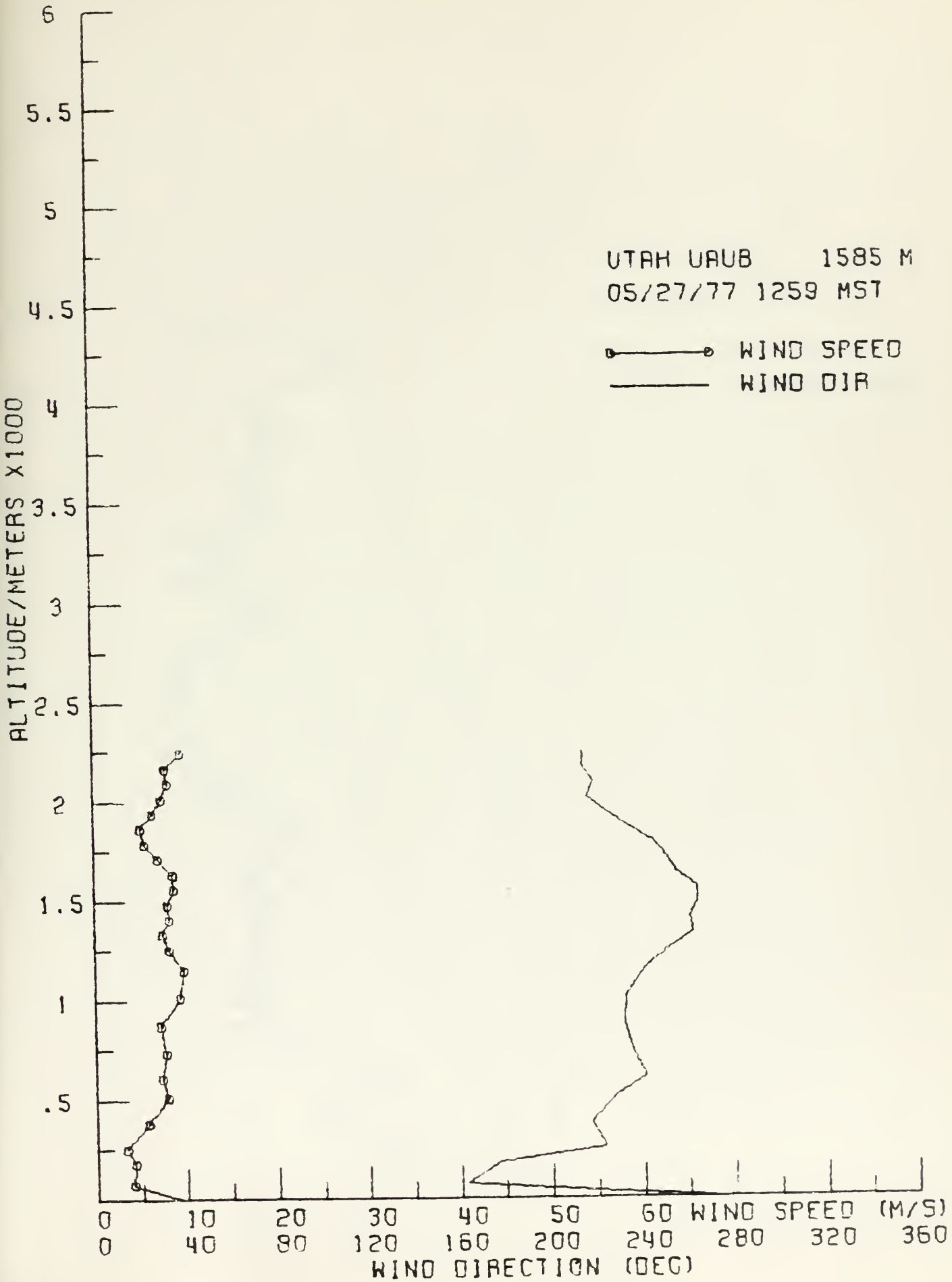
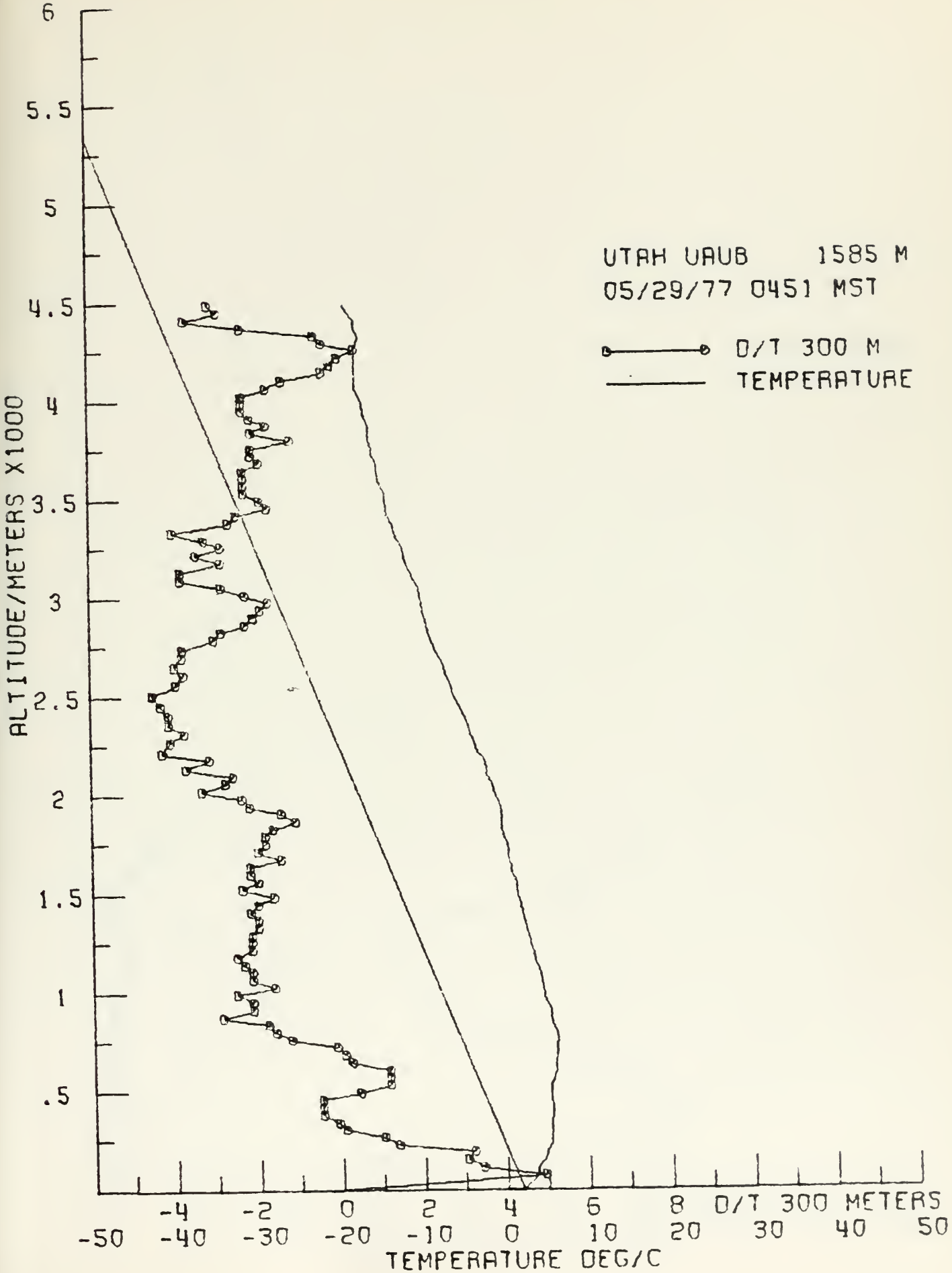
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
-4 -2 0 2 4 6 8 D/T 300 METERS
-50 -40 -30 -20 -10 0 10 20 30 40 50
TEMPERATURE DEG/C


UTAH UAUB 1585 M
05/27/77 1259 MST
WIND SPEED
WIND DIR
ALTITUDE/METERS X1000
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
0 10 20 30 40 50 60 WIND SPEED (M/S)
0 40 80 120 160 200 240 280 320 360
WIND DIRECTION (DEG)


UTAH UAUB 1585 M
05/29/77 0451 MST
D/T 300 M
TEMPERATURE
ALTITUDE/METERS X1000
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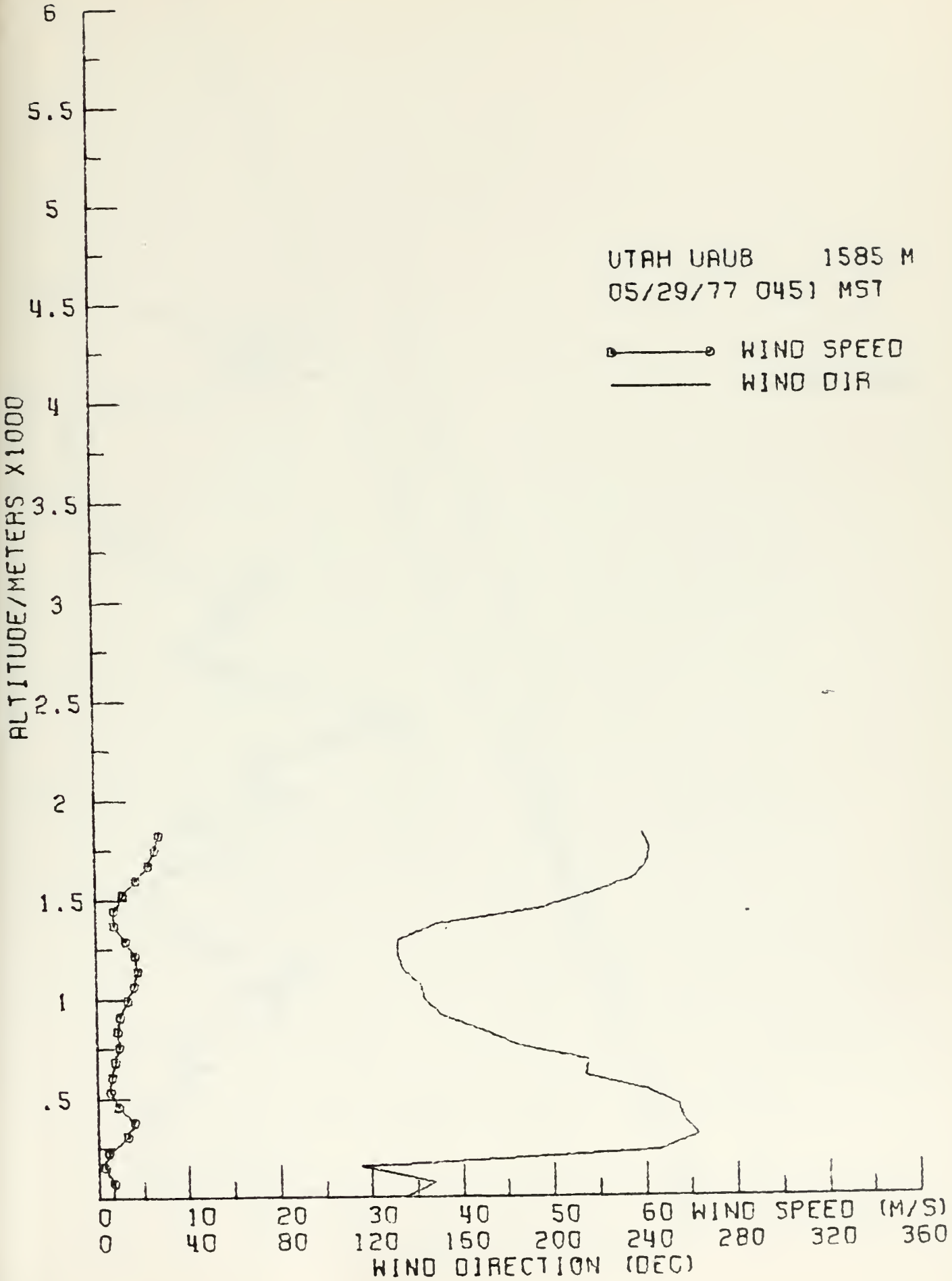
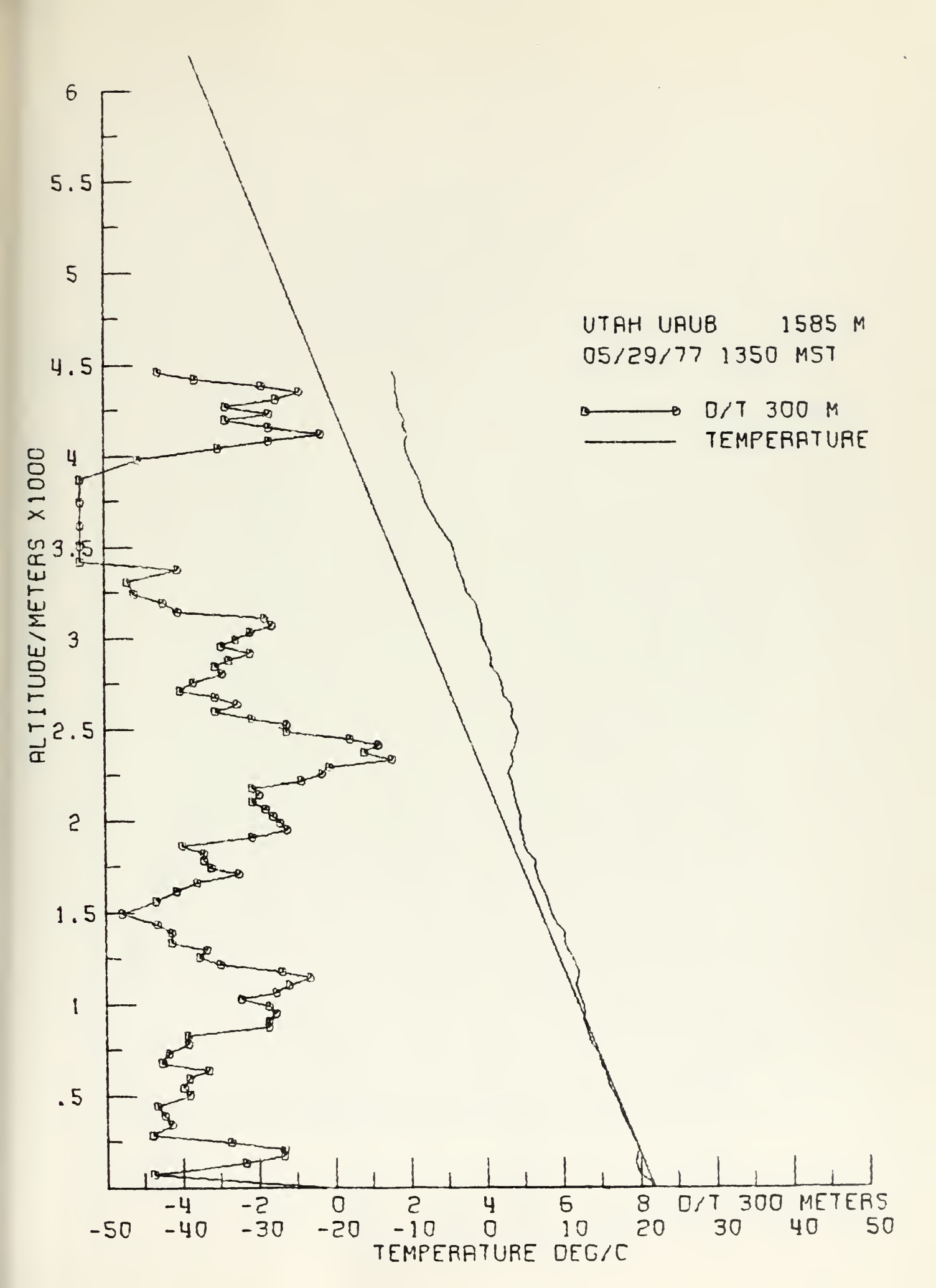
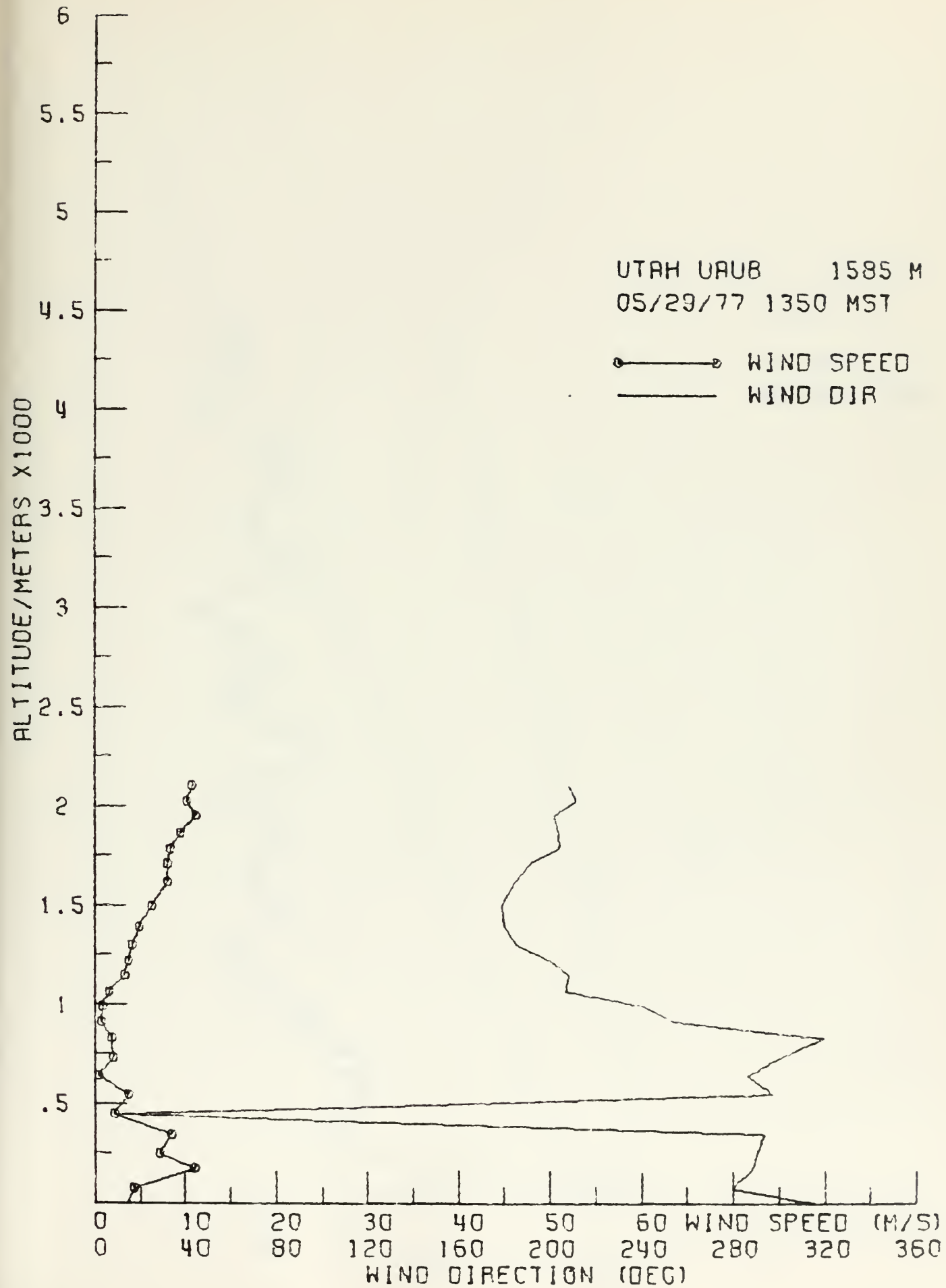
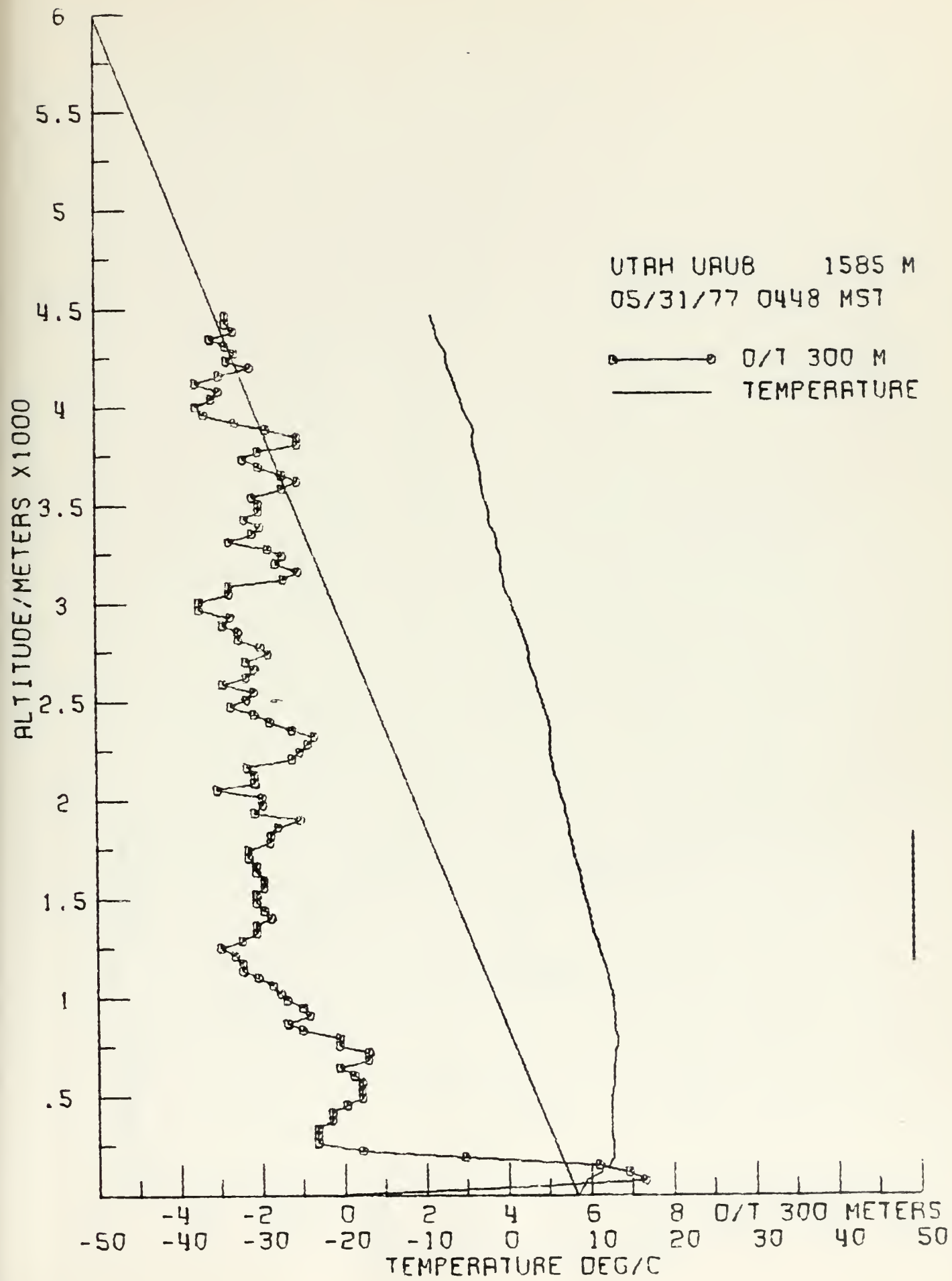
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
-4 -2 0 2 4 6 8 D/T 300 METERS
-50 -40 -30 -20 -10 0 10 20 30 40 50
TEMPERATURE DEG/C


UTAH UAUB 1585 M
05/29/77 0451 MST
WIND SPEED
WIND DIR
ALTITUDE/METERS X1000
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
0 10 20 30 40 50 60 WIND SPEED (M/S)
0 40 80 120 160 200 240 280 320 360
WIND DIRECTION (DEG)


UTAH UAUB 1585 M
05/29/77 1350 MST
D/T 300 M
TEMPERATURE
ALTITUDE/METERS X1000
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
-4 -2 0 2 4 6 8 D/T 300 METERS
-50 -40 -30 -20 -10 0 10 20 30 40 50
TEMPERATURE DEG/C


UTAH UAUB 1585 M
05/29/77 1350 MST
WIND SPEED
WIND DIR
ALTITUDE/METERS X1000
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
0 10 20 30 40 50 60 WIND SPEED (M/S)
0 40 80 120 160 200 240 280 320 360
WIND DIRECTION (DEG)


UTAH UAUB 1585 M
05/31/77 0448 MST
O/T 300 M
TEMPERATURE
ALTITUDE/METERS X1000
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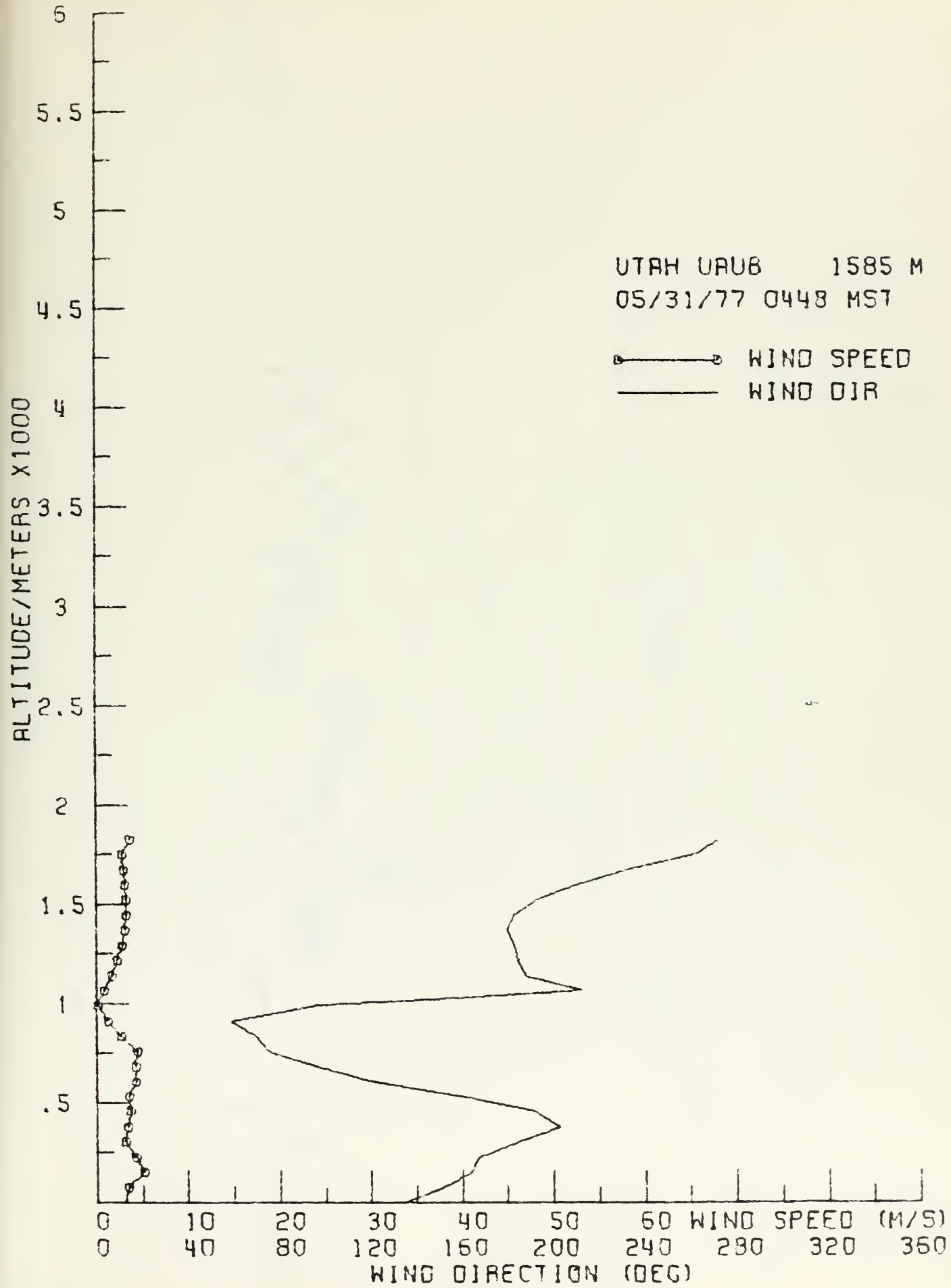
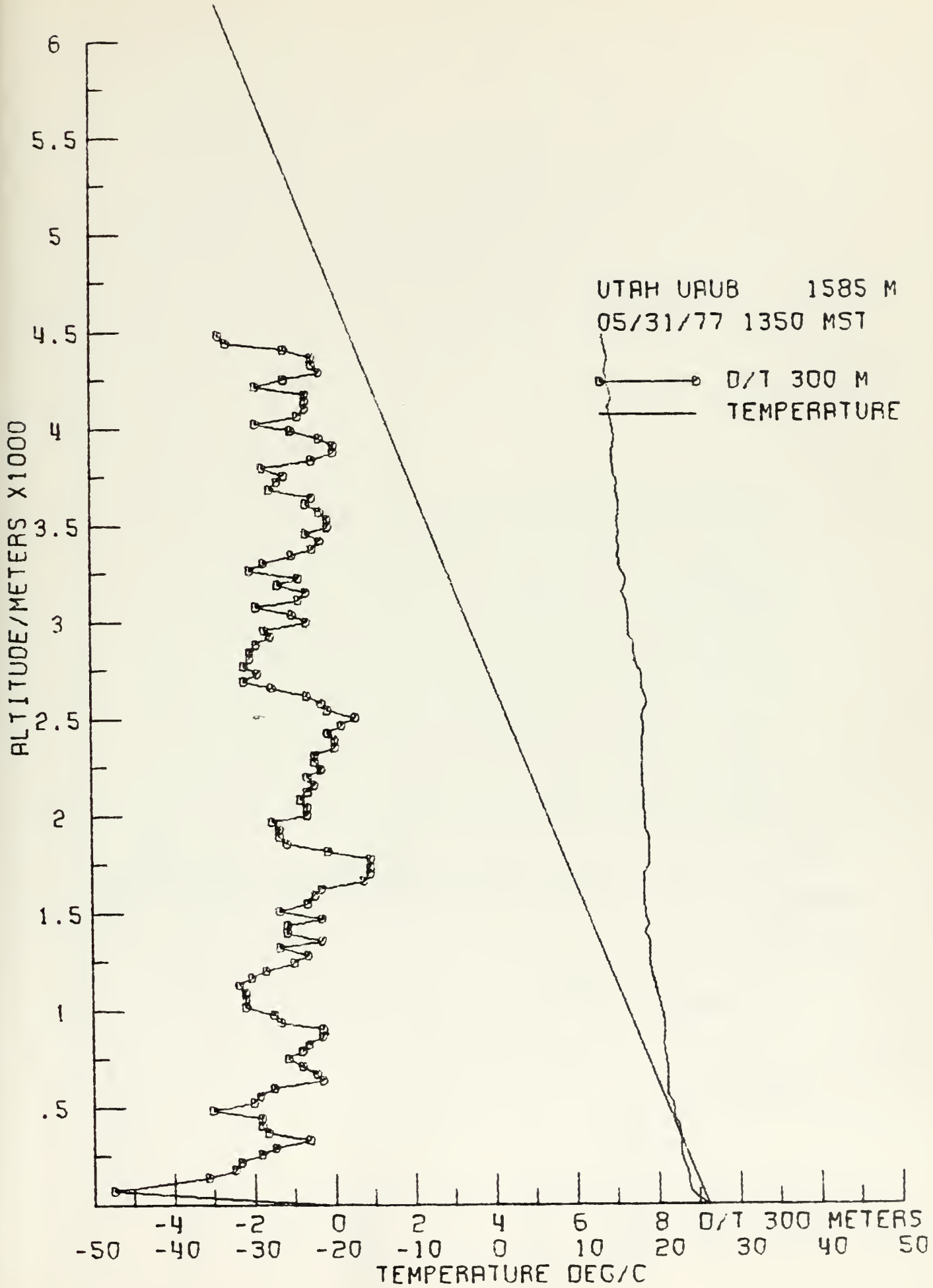
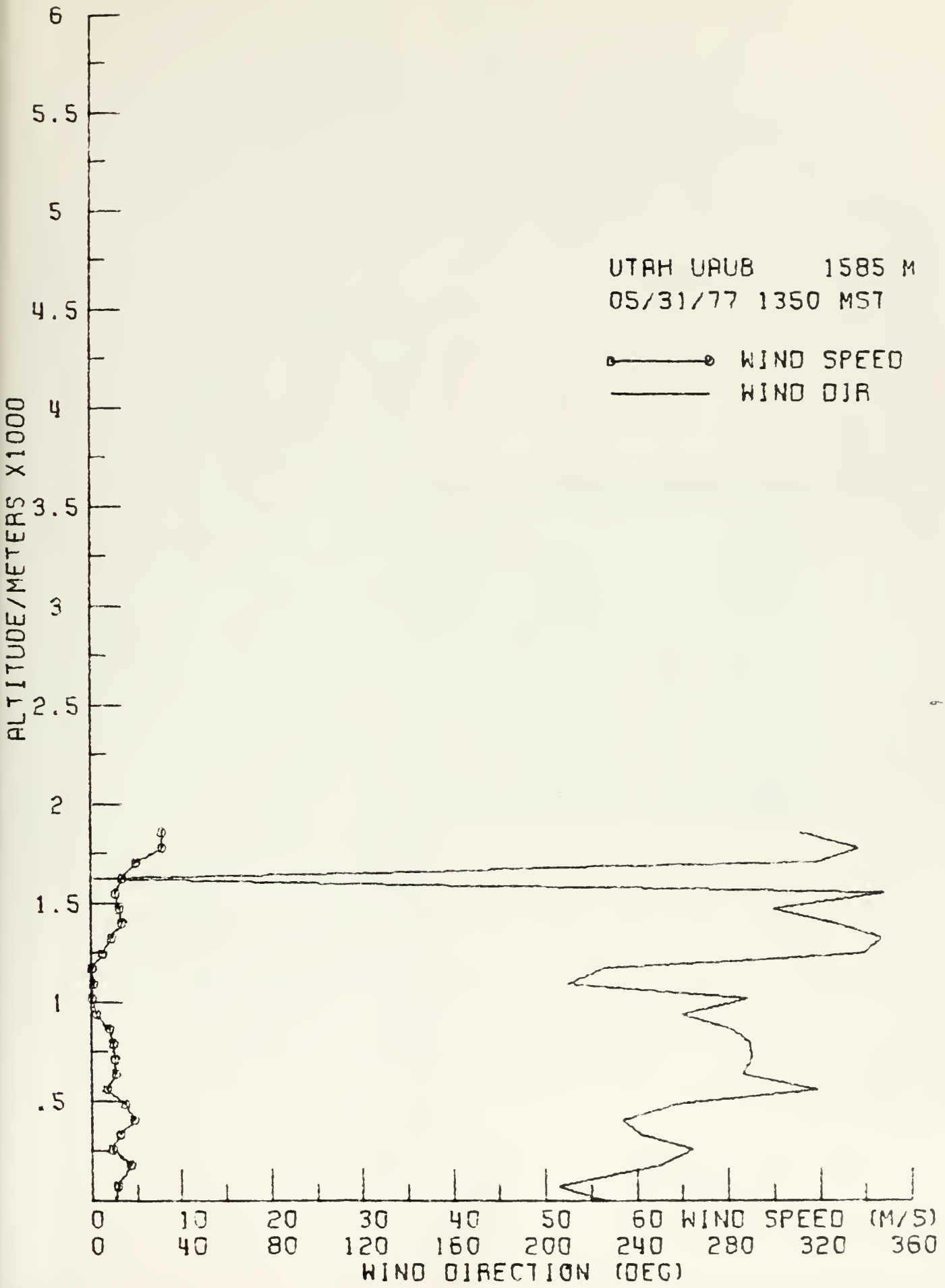
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
-4
-2
0
2
4
6
8
O/T 300 METERS
-50
-40
-30
-20
-10
0
10
20
30
40
50
TEMPERATURE DEG/C


UTAH UAUB 1585 M
05/31/77 0448 MST
WIND SPEED
WIND DIR
ALTITUDE/METERS X1000
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
0 10 20 30 40 50 60 WIND SPEED (M/S)
0 40 80 120 160 200 240 280 320 360
WIND DIRECTION (DEG)


UTAH UAUB 1585 M
05/31/77 1350 MST
D/T 300 M
TEMPERATURE
ALTITUDE/METERS X1000
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
-4 -2 0 2 4 6 8 D/T 300 METERS
-50 -40 -30 -20 -10 0 10 20 30 40 50
TEMPERATURE DEG/C

ALTITUDE/METERS X1000


UTAH UAUB 1585 M
05/31/77 1350 MST
WIND SPEED
WIND DIR
ALTITUDE/METERS X1000
6
5.5
5
4.5
4
3.5
3
2.5
2
1.5
1
.5
0 10 20 30 40 50 60 WIND SPEED (M/S)
0 40 80 120 160 200 240 280 320 360
WIND DIRECTION (DEG)

Form 1279–3
(June 1984)

BORROWE

DATE LOANED	BORROWER

USDI – BLM